FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Rogers Group, Inc. 412 Clark Road Washington, Indiana 47501

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F027-14746-03270

Issued by: Original Signed by Paul Dubenetzky

Paul Dubenetzky, Branch Chief

Office of Air Quality

Issuance Date: December 17, 2001

Expiration Date: December 17, 2006

Page 2 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

SECTION A	SOURCE SUMMARY
A.1	General Information [326 IAC 2-8-3(b)]
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
A.3	Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
A.4	FESOP Applicability [326 IAC 2-8-2]
A.5	Prior Permit Conditions
SECTION B	GENERAL CONDITIONS
B.1	Permit No Defense [IC 13]
B.2	Definitions [326 IAC 2-8-1]
B.3	Permit Term [326 IAC 2-8-4(2)]
B.4	Enforceability [326 IAC 2-8-6]
B.5	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
B.6	Severability [326 IAC 2-8-4(4)]
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
B.8	Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]
B.10	Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
B.11	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
B.12	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
B.13	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
B.14	Emergency Provisions [326 IAC 2-8-12]
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination
B.17	Permit Renewal [326 IAC 2-8-3(h)]
B.18	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
B.19	Operational Flexibility [326 IAC 2-8-15]
B.20	Permit Revision Requirement [326 IAC 2-8-11.1]
B.21	Inspection and Entry [326 IAC 2-8-5(a)(2)] [113-14-2-2]
B.22	Transfer of Ownership or Operation [326 IAC 2-8-10]
B.23	Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

SECTION C SOURCE OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.7 Volatile Organic Compounds (VOC) [326 IAC 8-5(a)(4)]
- C.8 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.13 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.14 Pressure Gauge Specifications

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.16 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Stationary Asphalt Plant

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.2 Particulate Matter (PM) [326 IAC 12, 40 CFR 60.92]
- D.1.3 Sulfur Dioxide (SO2) [326 IAC 7-1.1]
- D.1.4 Fuel Use Limit [326 IAC 2-8-4]
- D.1.5 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.7 Particulate Matter (PM) and PM10
- D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
- D.1.9 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]
- D.1.10 Compliance Determination [326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.11 Compliance Monitoring [326 IAC 7-2-1(c)(3)]
- D.1.12 Compliance Monitoring, Cutback Asphalt Limits
- D.1.13 Daily and Weekly Visible Emissions Notations
- D.1.14 Pressure and Water Flow Readings

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.1.15 Record Keeping Requirements
- D.1.16 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS Insignificant Activities

SECTION D.3 FACILITY OPERATION CONDITIONS Alternative Operating Scenario

Page 4 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

Emission Limitations and Standards [326 IAC 2-8-4(1)]

 a. Stationary A 	sphalt Plant
-------------------------------------	--------------

- D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.3.2 Particulate Matter (PM) [326 IAC 12, 40 CFR 60.92]
- D.3.3 Sulfur Dioxide (SO2) [326 IAC 7-1.1]
- D.3.4 Stationary Asphalt Plant Fuel Use Limit [326 IAC 2-8-4]
- D.3.5 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

b. Portable Asphalt Plant

- D.3.7 Particulate Matter (PM) [326 IAC 6-1-2]
- D.3.8 Opacity [326 IAC 5-1 and 326 IAC 12, 40 CFR 60.92]
- D.3.9 Sulfur Dioxide (SO2) [326 IAC 7-1.1]
- D.3.10 Portable Asphalt Plant Fuel Use Limit [326 IAC 2-8-4]
- D.3.11 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]
- D.3.12 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

a. Stationary Asphalt Plant

- D.3.13 Particulate Matter (PM) and PM10
- D.3.14 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
- D.3.15 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]
- D.3.16 Compliance Determination [326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)]

b. Portable Asphalt Plant

- D.3.17 Particulate Matter (PM) and PM10
- D.3.18 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]
- D.3.19 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]
- D.3.20 Compliance Determination [326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

a. Stationary Asphalt Plant

- D.3.21 Compliance Monitoring [326 IAC 7-2-1(c)(3)]
- D.3.22 Compliance Monitoring, Cutback Asphalt Limits
- D.3.23 Daily and Weekly Visible Emissions Notations
- D.3.24 Pressure and Water Flow Readings

b. Portable Asphalt Plant

- D.3.25 Compliance Monitoring [326 IAC 7-2-1(c)(3)]
- D.3.26 Daily and Weekly Visible Emissions Notations
- D.3.27 Hourly Monitoring of Baghouse Operating Parameters

Page 5 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

a. Stationary Asphalt Plant

D.3.28 Record Keeping Requirements
D.3.29 Reporting Requirements

b. Portable Asphalt Plant

D.3.30 Record Keeping Requirements

D.3.31 Reporting Requirements

Certification Form

Quarterly Deviation and Monitoring Report Form

Quarterly Report Form 1; Stationary Plant Monthly Fuel Use Limits

Quarterly Report Form 2; Stationary Plant Monthly Cutback Asphalt Limits

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a batch mix asphalt plant with a maximum capacity of 120 tons per hour.

Authorized individual: Van Medlock

Source Address: 412 Clark Road, Washington, Indiana 47501 Mailing Address: 412 Clark Road, Washington, Indiana 47501

SIC Code: 2951 Source Location Status: Daviess

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, PSD Program Minor Source, Part 70 Program

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) batch mixer, identified as AP2, capable of producing 120 tons of asphalt per hour, with emissions exhausted through a cyclone, identified as CE2 and scrubber (CE1), with emissions exiting through Stack SV1.
- (b) One (1) 69.1 MMBtu/hr natural gas, No.1 or No. 2 fuel oil, No. 4 fuel oil, or re-refined oil fired aggregate dryer, identified as AP1, with emissions exhausted through cyclone CE2 and Scrubber CE1, with emissions exiting through Stack SV1.
- (c) One (1) cyclone, identified as CE1, with a design air flow rate of 22,000 dscfm.
- (d) One (1) Standard Steel scrubber, identified as CE1, with a design water flow rate of 200 gallons per minute.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu/hr.
- (b) Paved and unpaved roads and parking lots with public access.

Page 7 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

- (c) Asbestos abatement projects regulated under 326 IAC 14-10.
- (d) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (e) One (1) 12,000 gallon TAC oil tan, identified as TV2,
- (f) Two (2) storage tanks for emulsified asphalt and MC dust oil, identified as TV3 and TV4, respectively, each with a design capacity of 8,000 gallons.
- (g) Two (2) liquid asphalt storage tanks, identified as TV5 and TV6, respectively, each with a design capacity of 12,000 gallons, heated by a 2.84 MMBtu/hr natural gas fired oil heater.
- (h) One (1) #2, #4, or re-refined oil storage tank, identified as TV7, with a design capacity of 10,000 gallons.
- (i) One (1) #1 or #2 fuel oil storage tank, identified as TV8, with a design capacity of 1,100 gallons.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 9 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent:
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

Page 11 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(3) Identification and quantification of the replacement parts that will be maintained in inventory for guick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

Page 15 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;

Page 16 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

Page 17 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 18 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

Page 20 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 13, 1996. The plan consists of:

- (a) Cleaning paved roads and parking lots by sweeping on an as needed basis (monthly minimum). Power brooming paced parking lots while wet.
- (b) Paving unpaved roads with asphalt. Treating with emulsified asphalt as needed. Treating with water as needed. Double chip and seal the road surface and maintain on an as needed basis.
- (c) Maintain minimum size and number of stick piles of aggregate. Treat around the stockpile with emulsified asphalt on an as needed basis. Treat around the stockpile with water as needed. Treat stockpiles with water as needed.
- (d) Apply water at the feed and the intermediate points of the conveyors as needed.
- (e) Minimize the vehicular distance between transfer points of aggregates. Enclose the transfer points. Apply water to the transfer points on an as needed basis.
- (f) Tarp aggregate hauling vehicles. Maintain vehicle bodies to prevent leakages. Spray aggregates with water during transport. Maintain a 1 mile per hour speed limit in the yard.
- (g) Reduce free fall distance during loading and unloading of the aggregate. Reduce the rate of discharge of the aggregate. Spray the aggregate with water on an as needed basis.

C.7 Volatile Organic Compounds (VOC) [326 IAC 8-5(a)(4)]

Pursuant to 326 IAC 8-5-2, the owner or operator shall not allow the use of asphalt emulsion containing more than seven percent (7%) oil distillate by volume emulsion, except as used for the following purposes:

- (a) penetrating prime coating,
- (b) stockpile storage mix, and
- (c) application during the months of November, December, January, February, and March.

C.8 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is/are in operation.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

Page 22 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

> (f) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Page 23 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

> Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, pH level, or any other applicable measurements, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- C.16 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]
 - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
 - (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
 - (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Page 26 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does/do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (1) One (1) batch mixer, identified as AP2, capable of producing 120 tons of asphalt per hour, with emissions exhausted through a cyclone, identified as CE2 and scrubber (CE1), with emissions exiting through Stack SV1.
- (2) One (1) 69.1 MMBtu/hr natural gas, No.1 or No. 2 fuel oil, No. 4 fuel oil, or re-refined oil fired aggregate dryer, identified as AP1, with emissions exhausted through cyclone CE2 and Scrubber CE1, with emissions exiting through Stack SV1.
- (3) One (1) cyclone, identified as CE1, with a design air flow rate of 22,000 dscfm.
- (4) One (1) Standard Steel scrubber, identified as CE1, with a design water flow rate of 200 gallons per minute.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter emissions from the aggregate dryer/mixer of the stationary asphalt plant shall not exceed 50.5 pounds per hour equivalent to 0.268 grains per dry standard cubic foot, and particulate matter from the entire asphalt plant shall not exceed 53.1 pounds per hour. Therefore, 326 IAC 2-2 is not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 12, 40 CFR 60.92]

Pursuant to 40 CFR 60, Section 60.92, on and after the date the performance test, required in Condition D.1.9 is completed, the owner or operator shall not discharge or cause to be discharged into the atmosphere, any gases from the asphalt plant which:

- (a) contain particulate matter (PM) greater than 0.04 gr/dscf, equivalent to 7.54 lb/hr, or
- (b) exhibit opacity greater than or equal to 20%.

D.1.3 Sulfur Dioxide (SO2) [326 IAC 7-1.1]

The dryer burner SO2 emissions shall not exceed:

- (a) five-tenths (0.5) pound per million British thermal units when combusting No. 1 and No. 2 distillate oils; or
- (b) one and six-tenths (1.6) pounds per million British thermal units when combusting No. 4 fuel oil and re-refined oils.

D.1.4 Fuel Use Limit [326 IAC 2-8-4]

The owner or operator shall limit fuel use at the aggregate dryer as follows:

(a) The total equivalent re-refined oil usage at the stationary batch mix asphalt plant shall not exceed 2,639,733 gallons per consecutive twelve (12) month period.

For the purposes of Paragraph (a) of this Condition, the following conversions shall be used to determine the equivalent re-refined oil use for the following alternative fuels:

 (1) Natural Gas:
 CuFt Natural Gas
 * 0.007042254
 = Gallons Re-refined Oil

 (2) No. 1/ No. 2 Fuel Oil:
 Gal No. 1/No. 2 Oil
 * 0.971831542
 = Gallons Re-refined Oil

 (3) No. 4 Fuel Oil:
 Gal No. 4 Fuel Oil
 * 1.028169722
 = Gallons Re-refined Oil

Page 28 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(b) When the portable asphalt plant is co-located with the stationary asphalt plant, the total monthly equivalent re-refined oil usage at the stationary batch mix asphalt plant shall not exceed the levels established in Condition D.3.4.

D.1.5 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]

The amount of binder used to produce cold mix (cutback) asphalt at the stationary plant shall be limited to 691 tons per year, based on a 12 rolling total, with the grade of cold mix (cutback) asphalt being either slow or medium cure only.

For the purposes of this condition, binder is defined as the sum of the oil distillate (solvent) and asphalt cement used when producing cold mix (cutback) asphalt.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.7 Particulate Matter (PM) and PM10

In order to comply with the emission limitations of Conditions C.1, C.2, D.1.1, and D.1.2, cyclone CE2 and scrubber CE1 shall be in operation at all times when batch mixer AP2 and aggregate dryer AP1 are in operation.

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Conditions C.1 and D.1.1, the Permittee shall perform PM and PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years or five (5) years after the most recent valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.9 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]

Pursuant to 40 CFR 60.93(a) and (b), the owner or operator shall determine compliance with the particulate matter (PM) and opacity limits of Condition D.1.2 by conducting performance tests as specified in 40 CFR 60, Section 60.8, utilizing the following test methods of Appendix A of Part 60:

- (a) Method 5 to determine the particulate matter concentration, with the sampling time and sample volume for each run being at least 60 minutes and 31.8 dscf, respectively, and
- (b) Method 9 and the procedures in 60.11 to determine opacity,

unless otherwise specified in 60.8.

D.1.10 Compliance Determination [326 IAC 326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)] The owner or operator shall determine compliance with the limits of Condition D.1.3 by sampling and analyzing all distillate and fuel oils combusted at the stationary plant and computing the sulfur dioxide (SO2) emission rates utilizing the applicable sampling and analysis data. Said sampling, analyses, and computations shall be performed as follows:

(a) Fuel Sampling and Analysis Methods:

To sample and analyze all fuel oils combusted at the stationary asphalt plant, the owner or operator shall either:

- (1) utilize the following prescribed methods:
 - (A) The fuel oil samples shall be collected utilizing one of the following methods:
 - (i) ASTM D4057-88*, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products", or
 - (ii) ASTM D4177-82*, "Standard Method for Automatic Sampling of Petroleum and Petroleum Products":
 - (B) The sulfur content shall be determined utilizing one of the following methods:
 - (i) ASTM D129-95*, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)",
 - (ii) ASTM D1266-91*, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)".
 - (iii) ASTM D1552-95*, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)", or
 - (iv) ASTM D2622-94*, "Standard Test Method for Sulfur in Petroleum Products (X-ray Spectrographic Method)"; and
 - (C) The heat content shall be determined utilizing ASTM D240-92*, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".
 - * Copies of the American Society for Testing and Materials (ASTM) procedures referenced may be obtained from ASTM, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (610) 832-9585 and are available for copying at the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46206-6015.

or

(2) utilize alternative sampling and analysis methods, provided the methods are determined, by the Office of Air Quality, to be acceptable equivalents to the methods specified in (a)(1) of this Condition.

or

- (3) utilize sampling and analysis data supplied by the vendor, as obtained from tests performed on the fuel oils prior to delivery of the fuel oil, provided the tests performed on the fuel oils are determined to be acceptable equivalents to the methods specified in paragraph (a)(1) of this Condition.
- (b) Sulfur Dioxide Emission Rates:

Computation of the calculated sulfur dioxide emissions rates to be used to demonstrate compliance with the limits of Condition D.1.3 shall be determined based on a calendar month average sulfur dioxide emission rate in pounds per million Btu, utilizing the applicable fuel sampling and analysis data and the emission factors contained in U. S. EPA publication

Page 30 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

AP-42, "Compilation of Air Pollutant Emission Factors" (September 1988)**, unless other emission factors based on site specific sulfur dioxide measurements are approved by the Office of Air Quality and the U. S. EPA.

** Copies of the Code of Federal Regulations (CFR) and AP-42 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402. Copies of pertinent sections are also available at the Indiana Department of Environmental management, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Room 1001, P.O. Box 6015, Indianapolis, IN 46206-6015.

In order to determine compliance with requirements of this Condition and Condition D.1.3, the Office of Air Quality reserves the right to, at any time, perform a systems audit to determine compliance with the required fuel sampling and analysis procedures. However, prior to such an audit, the owner or operator who becomes subject to an audit shall be provided a copy of the required audit procedures.

Should the Office of Air Quality make a determination of noncompliance with the requirements of this Condition or the limits of Condition D.1.3, no other compliance determination methods specified in 326 IAC 7 shall be used by the owner or operator to refute the evidence of noncompliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Compliance Monitoring [326 IAC 7-2-1(c)(3)]

To demonstrate compliance with the requirements of Conditions D.1.3 and D.1.4, the owner or operator shall, for all fuels combusted at the dryer burner during each calendar month:

- (a) either:
 - (1) list the sampling and analysis methods used to comply with the requirements of Condition D.1.10(a)(1) and record the results of said tests,
 - (2) list the sampling and analysis methods used to comply with the requirements of Condition D.1.10(a)(2) and record the results of said tests, or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.1.10(a)(3):
 - (A) obtain a certifications from the fuel supplier containing, at a minimum, the following:
 - (i) the name of the oil supplier,
 - (ii) a statement from the oil supplier that certifies the tests completed by the vendor are equivalent to the methods specified in Condition D.1.10(a)(1) and the data supplied by the vendor is correct and accurate, and
 - (iii) an attachment containing the information necessary to determine the fuel properties required in Paragraph (b) of this Condition; and
 - (B) complete a certification, signed by the owner or operator, that states that the certifications and fuel sampling and analyses conducted, represent all of the fuel combusted during the period;

- (b) record the following fuel oil properties, utilizing the applicable methods specified in Condition D.1.10:
 - the calendar month average sulfur content of all No. 1 and No. 2 oils combusted in percent sulfur.
 - (2) the calendar month average sulfur content of all No. 4 and re-refined oils combusted in percent sulfur,
 - (3) the heat content of each fuel combusted in Btu/ gallons or Btu/cf, whichever is applicable,
 - (4) the sulfur dioxide emission rate in pounds per million Btu; and
- (c) record on a monthly basis:
 - (1) the applicable month,
 - (2) the amount of re-refined oil in gallons per month,
 - (3) the amount of equivalent natural gas in gallons of re-refined oil per month,
 - (4) the amount of equivalent No. 1/ No. 2 fuel oils in gallons of re-refined oil per month, and
 - (5) the amount of equivalent No. 4 fuel oil in gallons of re-refined oil per month,

combusted at the aggregate dryer.

D.1.12 Compliance Monitoring, Cutback Asphalt Limit

To demonstrate compliance with the requirements of Condition D.1.5, the owner or operator shall on a monthly basis, record:

- (a) the grade(s) of asphalt produced (slow, medium, and/or rapid), and
- (b) the total amount of input cold mix (cutback) asphalt binder.

D.1.13 Daily and Weekly Visible Emissions Notations

The owner or operator shall perform visible emissions observations as follows:

- (a) The owner or operator shall perform daily visible emissions observations per a method approved by the OAQ to determine compliance with operation conditions C.2 and D.1.2.
- (b) The owner or operator shall also perform weekly visible emissions observations on the cyclone, scrubber, scavenger system ductwork and associated components (e.g., hoppers, etc.) for evidence of fugitive emissions, holes, corrosion, audible leaks, and the like. This does not require the use of a certified visible emissions reader.

In the event that visible emissions are detected above the limits required by operation conditions C.2 or D.1.2 are detected on the external cyclone and scrubber components, the Corrective Action Contingency Plan shall be implemented. Corrective action shall be taken within 8 hours of discovery. If the initial corrective action plan does not correct the problem, then additional corrective actions shall be devised within 8 hours of discovery and shall include a timetable for completion. The corrective actions shall be implemented immediately in accordance with those timetables.

D.1.14 Pressure and Water Flow Readings

- (a) The owner or operator shall collect pressure and scrubbing liquid (water) flow rate readings from the scrubber controlling the aggregate drying operation every four hours while the dryer is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 7.0 and 10.0 inches of water and the flow rate for scrubbing liquid shall be maintained at approximately 200 gallons of water per minute or a range and flow rate established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading or scrubbing water flow rate is outside of the above mentioned range for any one reading.
- (b) The instrument used for determining the pressure shall comply with Condition C.14 Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.15 Record Keeping Requirements

The owner or operator shall keep:

- (a) either:
 - (1) a copy of the sampling and analysis test results as specified in Condition D.1.11(a)(1),
 - (2) a copy of the sampling and analysis test results as specified in Condition D.1.11(a)(2), or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.1.10(a)(3), copies of the certifications required in Condition D.1.11(a)(3);
- (b) records of the fuel oil properties required in Condition D.1.11(b);
- (c) records of the amount of fuel combusted, as required in Condition D.1.11(c);
- (d) records of the grade(s) of cold mix (cutback) asphalt used and total amount of cold mix (cutback) asphalt binder used, as required in Condition D.1.12;
- (e) records of all visible emission notations from the scrubber/cyclone system as required in Condition D.1.13; and
- (f) records of all required pressures and water flow rate recordings from the scrubber/cyclone system while the stationary asphalt plant is in operation, as required in Condition D.1.14.

All records required to be kept in this Condition shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.4 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using reporting forms 1 and 2 located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (1) Natural gas fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu/hr.
- (2) Paved and unpaved roads and parking lots with public access.
- (3) Asbestos abatement projects regulated under 326 IAC 14-10.
- (4) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (5) One (1) 12,000 gallon TAC oil tan, identified as TV2.
- (6) Two (2) storage tanks for emulsified asphalt and MC dust oil, identified as TV3 and TV4, respectively, each with a design capacity of 8,000 gallons.
- (7) Two (2) liquid asphalt storage tanks, identified as TV5 and TV6, respectively, each with a design capacity of 12,000 gallons, heated by a 2.84 MMBtu/hr natural gas fired oil heater.
- (8) One (1) #2, #4, or re-refined oil storage tank, identified as TV7, with a design capacity of 10,000 gallons.
- (9) One (1) #1 or #2 fuel oil storage tank, identified as TV8, with a design capacity of 1,100 gallons.

There are no conditions applicable to these facilities.

SECTION D.3 ALTERNATIVE OPERATING SCENARIO

Facility Description [326 IAC 2-8-4(10)]:

(a) Stationary Asphalt Plant Affected Facilities:

- (1) One (1) batch mixer, identified as AP2, capable of producing 120 tons of asphalt per hour, with emissions exhausted through a cyclone, identified as CE2 and scrubber (CE1), with emissions exiting through Stack SV1.
- (2) One (1) 69.1 MMBtu/hr natural gas, No.1 or No. 2 fuel oil, No. 4 fuel oil, or re-refined oil fired aggregate dryer, identified as AP1, with emissions exhausted through cyclone CE2 and Scrubber CE1, with emissions exiting through Stack SV1.
- (3) One (1) cyclone, identified as CE1, with a design air flow rate of 22,000 dscfm.
- (4) One (1) Standard Steel scrubber, identified as CE1, with a design water flow rate of 200 gallons per minute.

(c) Portable Asphalt Plant Affected Facilities:

- (1) One (1) drum hot-mix asphalt plant (AP1) capable of producing 350 tons per hour of asphalt and exhausting through a baghouse and exiting through stack SV1.
- (3) One (1) 116 million British thermal units per hour fuel oil #2 fired aggregate dryer (C1) also exhausting through the baghouse, and using natural gas as a backup fuel when available.
- (4) One (1) jet pulse baghouse (CE1) with a total filter area of 10,532 square feet.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

Stationary Asphalt Plant (027-14746-03270):

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter emissions from the aggregate dryer/mixer of the stationary asphalt plant shall not exceed 50.5 pounds per hour equivalent to 0.268 grains per dry standard cubic foot, and particulate matter from the entire asphalt plant shall not exceed 53.1 pounds per hour. Therefore, 326 IAC 2-2 is not applicable.

D.3.2 Particulate Matter (PM) [326 IAC 12, 40 CFR 60.92]

Pursuant to 40 CFR 60, Section 60.92, on and after the date the performance test, required in Condition D.3.15 is completed, the owner or operator shall not discharge or cause to be discharged into the atmosphere, any gases from the asphalt plant which:

- (a) contain particulate matter (PM) greater than 0.04 gr/dscf equivalent to 7.54 lb/hr, or
- (b) exhibit opacity greater than or equal to 20%.

D.3.3 Sulfur Dioxide (SO2) [326 IAC 7-1.1]

The aggregate dryer burner SO2 emissions shall not exceed:

(a) five-tenths (0.5) pound per million British thermal units when combusting No. 1 and No. 2 distillate oils: or

(b) one and six-tenths (1.6) pounds per million British thermal units when combusting No. 4 fuel oil and re-refined oils.

D.3.4 Stationary Asphalt Plant Fuel Use Limit [326 IAC 2-8-4]

The total equivalent re-refined oil usage at the stationary batch mix asphalt plant shall not exceed 121,088 gallons per month during any month the portable asphalt plant is co-located with the stationary asphalt plant.

For the purposes of this Condition, the following conversions shall be used to determine the equivalent re-refined oil use for the following alternative fuels:

(a) Natural Gas: CuFt Natural Gas * 0.007042254 = Gallons Re-refined Oil
(b) No. 1/ No. 2 Fuel Oil: Gal No. 1/ No. 2 Oil * 0.971831542 = Gallons Re-refined Oil
(c) No. 4 Fuel Oil: Gal No. 4 Fuel Oil * 1.028169722 = Gallons Re-refined Oil

D.3.5 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]

The amount of binder used to produce cold mix (cutback) asphalt at the stationary plant shall be limited to 691 tons per year, based on a 12 rolling total, with the grade of cold mix (cutback) asphalt being either slow or medium cure only.

For the purposes of this condition, binder is defined as the sum of the oil distillate (solvent) and asphalt cement used when producing cold mix (cutback) asphalt.

D.3.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Portable Asphalt Plant (025-7575-05023, issued August 4, 1997):

D.3.7 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the aggregate dryer/mixer shall not exceed 0.030 grains per dry standard cubic foot equivalent to 11.0 pounds per hour. Compliance with these limits will satisfy the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I).

D.3.8 Opacity Limitations [326 IAC 5-1 and 326 IAC 12, 40 CFR 60.92]

Pursuant to New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I), visible emissions from the portable asphalt plant shall not exceed 20 percent opacity. Compliance with this limit will also satisfy 326 IAC 5-1.

D.3.9 Sulfur Dioxide (SO2) [326 IAC 7-1.1]

The aggregate dryer sulfur dioxide (SO2) emissions shall not exceed five-tenths (0.5) pound per million British thermal units when combusting No. 1 and No. 2 distillate oils.

D.3.10 Portable Asphalt Plant Fuel Use Limit [326 IAC 2-8-4]

The total equivalent combined No. 1/No. 2 fuel oil usage at the portable plant shall not exceed 98,192 gallons per month when the portable asphalt plant is co-located with the stationary asphalt plant.

For the purposes of this Condition, the following conversion shall be used to determine the equivalent No. 1/No.2 fuel oil use for natural gas:

Page 36 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

CuFt Natural Gas

* 0.007042254 = No. 1/No. 2 Fuel Oil

D.3.11 Use of Cutback / Emulsified Asphalts [326 IAC 2-8-4]

The owner or operator shall not process cutback/emulsified asphalt unless proper approval has been obtained from the Indiana Department of Environmental Management, Office of Air Quality.

D.3.12 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

Stationary Asphalt Plant (027-14746-03270):

D.3.13 Particulate Matter (PM) and PM10

In order to comply with the emission limitations of Conditions C.1, C.2, D.3.1, D.3.2, and D.3.4, cyclone CE2 and scrubber CE1 shall be in operation at all times when batch mixer AP2 and aggregate dryer AP1 are in operation.

D.3.14 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Conditions C.1, D.3.1, and D.3.4, the Permittee shall perform PM and PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years or five (5) years after the most recent valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.3.15 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]

Pursuant to 40 CFR 60.93(a) and (b), the owner or operator shall determine compliance with the particulate matter (PM) and opacity limits of Condition D.3.2 by conducting performance tests as specified in 40 CFR 60, Section 60.8, utilizing the following test methods of Appendix A of Part 60:

- (a) Method 5 to determine the particulate matter concentration, with the sampling time and sample volume for each run being at least 60 minutes and 31.8 dscf, respectively, and
- (b) Method 9 and the procedures in 60.11 to determine opacity,

unless otherwise specified in 60.8.

D.3.16 Compliance Determination [326 IAC 326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)] The owner or operator shall determine compliance with the limits of Condition D.3.3 by sampling and analyzing all distillate and fuel oils combusted at the stationary plant and computing the sulfur dioxide (SO2) emission rates utilizing the applicable sampling and analysis data. Said sampling, analyses, and computations shall be performed as follows:

(a) Fuel Sampling and Analysis Methods:

To sample and analyze all fuel oils combusted at the stationary asphalt plant, the owner or operator shall either:

Page 37 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

- (1) utilize the following prescribed methods:
 - (A) The fuel oil samples shall be collected utilizing one of the following methods:
 - (i) ASTM D4057-88*, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products", or
 - (ii) ASTM D4177-82*, "Standard Method for Automatic Sampling of Petroleum and Petroleum Products";
 - (B) The sulfur content shall be determined utilizing one of the following methods:
 - (i) ASTM D129-95*, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)",
 - (ii) ASTM D1266-91*, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)",
 - (iii) ASTM D1552-95*, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)", or
 - (iv) ASTM D2622-94*, "Standard Test Method for Sulfur in Petroleum Products (X-ray Spectrographic Method)"; and
 - (C) The heat content shall be determined utilizing ASTM D240-92*, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".
 - * Copies of the American Society for Testing and Materials (ASTM) procedures referenced may be obtained from ASTM, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania, 19428, (610) 832-9585, and are available for copying at the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46206-6015.

or

(2) utilize alternative sampling and analysis methods, provided the methods are determined, by the Office of Air Quality, to be acceptable equivalents to the methods specified in (a)(1) of this Condition.

or

- (3) utilize sampling and analysis data supplied by the vendor, as obtained from tests performed on the fuel oils prior to delivery of the fuel oil, provided the tests performed on the fuel oils are determined to be acceptable equivalents to the methods specified in paragraph (a)(1) of this Condition.
- (b) Sulfur Dioxide Emission Rates:

Computation of the calculated sulfur dioxide emissions rates to be used to demonstrate compliance with the limits of Condition D.3.3 shall be determined based on a calendar month average sulfur dioxide emission rate in pounds per million Btu, utilizing the applicable fuel sampling and analysis data collected and the emission factors contained in U. S. EPA publication AP-42, "Compilation of Air Pollutant Emission Factors" (September 1988)**, unless other emission factors based on site specific sulfur dioxide measurements are approved by the Office of Air Quality and the U. S. EPA.

** Copies of the Code of Federal Regulations (CFR) and AP-42 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402. Copies of pertinent sections are also available at the Indiana Department of Environmental management, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Room 1001, P.O. Box 6015, Indianapolis, IN 46206-6015.

In order to determine compliance with requirements of this Condition and Condition D.3.3, the Office of Air Quality reserves the right to, at any time, perform a systems audit to determine compliance with the required fuel sampling and analysis procedures. However, prior to such an audit, the owner or operator who becomes subject to an audit shall be provided a copy of the required audit procedures.

Should the Office of Air Quality make a determination of noncompliance with the requirements of this Condition or the limits of Condition D.3.3, no other compliance determination methods specified in 326 IAC 7 shall be used by the owner or operator to refute the evidence of noncompliance.

Portable Asphalt Plant (025-7575-05023, issued August 4, 1997):

D.3.17 Particulate Matter (PM) and PM10

In order to comply with the emission limitations of Conditions C.1, C.2, D.3.7, D.3.8, and D.3.10, the portable asphalt plant baghouse/cyclone system shall be in operation at all times when the portable asphalt plant aggregate dryer is in operation.

D.3.18 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Conditions C.1, D.3.7 and D.3.10, the owner or operator shall perform PM and PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years or five (5) years after the most recent valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.3.19 Testing Requirements [326 IAC 12, 40 CFR 60.93(a) and (b)]

Pursuant to 40 CFR 60.93(a) and (b), the owner or operator shall determine compliance with the particulate matter (PM) and opacity limits of Conditions D.3.7 and D.3.8 by conducting performance tests as specified in 40 CFR 60, Section 60.8, utilizing the following test methods of Appendix A of Part 60:

- (a) Method 5 to determine the particulate matter concentration, with the sampling time and sample volume for each run being at least 60 minutes and 31.8 dscf, respectively, and
- (b) Method 9 and the procedures in 60.11 to determine opacity,

unless otherwise specified in 60.8.

D.3.20 Compliance Determination [326 IAC 326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)] The owner or operator shall determine compliance with the limits of Condition D.3.9 by sampling and analyzing all distillate and fuel oils combusted at the portable plant and computing the sulfur dioxide (SO2) emission rates utilizing the applicable sampling and analysis data. Said sampling, analyses, and computations shall be performed as follows:

(a) Fuel Sampling and Analysis Methods:

To sample and analyze all fuel oils combusted at the portable asphalt plant, the owner or operator shall either:

- (1) utilize the following prescribed methods:
 - (A) The fuel oil samples shall be collected utilizing one of the following methods:
 - (i) ASTM D4057-88*, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products", or
 - (ii) ASTM D4177-82*, "Standard Method for Automatic Sampling of Petroleum and Petroleum Products":
 - (B) The sulfur content shall be determined utilizing one of the following methods:
 - (i) ASTM D129-95*, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)",
 - (ii) ASTM D1266-91*, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)".
 - (iii) ASTM D1552-95*, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)", or
 - (iv) ASTM D2622-94*, "Standard Test Method for Sulfur in Petroleum Products (X-ray Spectrographic Method)"; and
 - (C) The heat content shall be determined utilizing ASTM D240-92*, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".
 - * Copies of the American Society for Testing and Materials (ASTM) procedures referenced may be obtained from ASTM, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania, 19428, (610) 832-9585, and are available for copying at the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46206-6015.

or

(2) utilize alternative sampling and analysis methods, provided the methods are determined, by the Office of Air Quality, to be acceptable equivalents to the methods specified in (a)(1) of this Condition.

or

(3) utilize sampling and analysis data supplied by the vendor, as obtained from tests performed on the fuel oils prior to delivery of the fuel oil, provided the tests performed on the fuel oils are determined to be acceptable equivalents to the methods specified in paragraph (a)(1) of this Condition.

Page 40 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

(b) Sulfur Dioxide Emission Rates:

Computation of the calculated sulfur dioxide emissions rates to be used to demonstrate compliance with the limits of Condition D.3.9 shall be determined based on a calendar month average sulfur dioxide emission rate in pounds per million Btu, utilizing the applicable fuel sampling and analysis data, and the emission factors contained in U. S. EPA publication AP-42, "Compilation of Air Pollutant Emission Factors" (September 1988)**, unless other emission factors based on site specific sulfur dioxide measurements are approved by the Office of Air Quality and the U. S. EPA.

** Copies of the Code of Federal Regulations (CFR) and AP-42 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402. Copies of pertinent sections are also available at the Indiana Department of Environmental management, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Room 1001, P.O. Box 6015, Indianapolis, IN 46206-6015.

In order to determine compliance with requirements of this Condition and Condition D.3.9, the Office of Air Quality reserves the right to, at any time, perform a systems audit to determine compliance with the required fuel sampling and analysis procedures. However, prior to such an audit, the owner or operator who becomes subject to an audit shall be provided a copy of the required audit procedures.

Should the Office of Air Quality make a determination of noncompliance with the requirements of this Condition or the limits of Condition D.3.9, no other compliance determination methods specified in 326 IAC 7 shall be used by the owner or operator to refute the evidence of noncompliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

Stationary Asphalt Plant (027-14746-03270):

D.3.21 Compliance Monitoring [326 IAC 7-2-1(c)(3)]

To demonstrate compliance with the requirements of Conditions D.3.3 and D.3.4, the owner or operator shall, for all fuels combusted at the dryer burner during each calendar month:

(a) either:

- (1) list the sampling and analysis methods used to comply with the requirements of Condition D.3.16(a)(1) and record the results of said tests,
- (2) list the sampling and analysis methods used to comply with the requirements of Condition D.3.16(a)(2) and record the results of said tests, or
- (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.3.16(a)(3):
 - (A) obtain a certifications from the fuel supplier containing, at a minimum, the following:
 - (i) the name of the oil supplier,
 - (iii) a statement from the oil supplier that certifies the tests completed by the vendor are equivalent to the methods specified in Condition D.3.16(a)(1) and the data supplied by the vendor is correct and accurate, and
 - (iii) an attachment containing the information necessary to determine the fuel properties required in Paragraph (b) of this Condition; and

- (B) complete a certification, signed by the owner or operator, that states that the certifications and fuel sampling and analyses conducted, represent all of the fuel combusted during the period;
- (b) record the following fuel oil properties, utilizing the applicable methods specified in Condition D.3.16:
 - (1) the calendar month average sulfur content of all No. 1 and No. 2 oils combusted in percent sulfur,
 - (2) the calendar month average sulfur content of all No. 4 and re-refined oils combusted in percent sulfur.
 - (3) the heat content of each fuel combusted in Btu/ gallons or Btu/cf, whichever is applicable,
 - (4) the sulfur dioxide emission rate in pounds per million Btu; and
- (c) record on a monthly basis:
 - (1) the applicable month,
 - (2) the amount of re-refined oil in gallons per month,
 - (3) the amount of equivalent natural gas in gallons of re-refined oil per month,
 - (4) the amount of equivalent No. 1/No. 2 fuel oils in gallons of re-refined oil per month, and
 - (5) the amount of equivalent No. 4 fuel oil in gallons of re-refined oil per month,

combusted at aggregate dryer.

D.3.22 Compliance Monitoring, Cutback Asphalt Limit

To demonstrate compliance with the requirements of Condition D.3.5, the owner or operator shall on a monthly basis, record:

- (a) the grade(s) of asphalt produced (slow, medium, and/or rapid), and
- (b) the total amount of input cold mix (cutback) asphalt binder.

D.3.23 Daily and Weekly Visible Emissions Notations

The owner or operator shall perform visible emissions observations as follows:

- (a) The owner or operator shall perform daily visible emissions observations per a method approved by the OAQ to determine compliance with operation conditions C.2 and D.3.2.
- (b) The owner or operator shall also perform weekly visible emissions observations on the cyclone, scrubber, scavenger system ductwork and associated components (e.g., hoppers, etc.) for evidence of fugitive emissions, holes, corrosion, audible leaks, and the like. This does not require the use of a certified visible emissions reader.

In the event that visible emissions are detected above the limits required by operation conditions C.2 or D.3.2 are detected on the external cyclone and scrubber components, the Corrective Action Contingency Plan shall be implemented. Corrective action shall be taken within 8 hours of discovery. If the initial corrective action plan does not correct the problem, then additional corrective actions shall be devised within 8 hours of discovery and shall include a timetable for completion. The corrective actions shall be implemented immediately in accordance with those timetables.

Page 42 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

D.3.24 Pressure and Water Flow Readings

- (a) The owner or operator shall collect pressure and scrubbing liquid (water) flow rate readings from the scrubber controlling the aggregate drying operation every four hours while the dryer is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 7.0 and 10.0 inches of water and the flow rate for scrubbing liquid shall be maintained at approximately 200 gallons of water per minute or a range and flow rate established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading or scrubbing water flow rate is outside of the above mentioned range for any one reading.
- (b) The instrument used for determining the pressure shall comply with Condition C.14 Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Portable Asphalt Plant (025-7575-05023, issued August 4, 1997):

D.3.25 Compliance Monitoring [326 IAC 7-2-1(c)(3)]

To demonstrate compliance with the requirements of Conditions D.3.9 and D.3.10, the owner or operator shall, for all fuels combusted at the dryer burner during each calendar month:

- (a) either:
 - (1) list the sampling and analysis methods used to comply with the requirements of Condition D.3.20(a)(1) and record the results of said tests,
 - (2) list the sampling and analysis methods used to comply with the requirements of Condition D.3.20(a)(2) and record the results of said tests, or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.3.20(a)(3):
 - (A) obtain a certifications from the fuel supplier containing, at a minimum, the following:
 - (i) the name of the oil supplier.
 - (ii) a statement from the oil supplier that certifies the tests completed by the vendor are equivalent to the methods specified in Condition D.3.20(a)(1) and the data supplied by the vendor is correct and accurate, and
 - (iii) an attachment containing the information necessary to determine the fuel properties required in Paragraph (b) of this Condition; and
 - (B) complete a certification, signed by the owner or operator, that states that the certifications and fuel sampling and analyses conducted, represent all of the fuel combusted during the period;
- (b) record the following fuel oil properties, utilizing the applicable methods specified in Condition D.3.20:
 - the calendar month average sulfur content of all No. 1 and No. 2 oils combusted in percent sulfur.
 - (2) the heat content of each fuel combusted in Btu/ gallons or Btu/cf, whichever is applicable,
 - (3) the sulfur dioxide emission rate in pounds per million Btu; and

- (c) record on a monthly basis:
 - (1) the applicable month,
 - (2) the amount of No. 1/No. 2 fuel oil in gallons per month, and
 - (3) the amount of equivalent natural gas in gallons No.1/No.2 fuel oil per month,

combusted at portable asphalt plant aggregate dryer.

D.3.26 Daily and Weekly Visible Emissions Notations

- (a) That the Permittee shall perform daily visible emissions observations consistent with a method approved by the OAQ to determine compliance with operation conditions C.2 and D.3.8.
- (b) That the Permittee shall perform weekly visible emissions observations on the external baghouse unit, cyclone, scavenger system ductwork and associated component (e.g., hoppers, etc.) for evidence of fugitive emissions, holes, corrosion, audible leaks, and the like. This does not require the use of a certified visible emissions reader.

In the event that visible emissions are detected above the limit required by operation conditions C.2 and D.3.8 are detected on the external baghouse components, the Corrective Action Contingency Plan shall be implemented. Corrective action shall be taken within 8 hours of discovery. If the initial corrective action plan does not correct the problem, then additional corrective actions shall be devised within 8 hours of discovery and shall include a timetable for completion. The corrective actions shall be implemented immediately in accordance with those timetables.

D.3.27 Hourly Monitoring of Baghouse Operational Parameters

The owner or operator shall operate the baghouse/cyclone collection and scavenger capture systems at all times when the aggregate dryer is in operation, and monitor the monitor the following parameters on an hourly basis:

(a) Pressure drop (inlet/outlet differential static pressure) between the baghouse

The baghouse pressure drop shall be maintained within the following range of 3.0 to 4.0 inches of water.

If the unit is observed to be operating with a differential static pressure above the high end range or below the low end range for more than 2 hours of the production day, the trouble-shooting contingency plan and corrective action shall be taken within 8 hours of discovery in accordance with Rogers Group, Incorporated Corrective Action Contingency Plan. The company shall also document the cause of the out of range reading. Failure or partial failure of control devices shall be reported to IDEM according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM.

(b) Inlet temperature to the baghouse:

The inlet temperature to the baghouse shall be maintained within a range of 225 - 325 degrees Fahrenheit to prevent overheating of the bags and to prevent low temperatures from mudding up the bags.

In the event that the temperature is outside of the range, corrective action shall be taken within 8 hours. The operational parameters shall be monitored for indications of bag failure. The thermocouple at the inlet has a temperature switch which automatically shuts the burner off if the high end range is exceeded.

In the event that bag failure has occurred due to rupture, melting., etc., corrective action shall be taken. Dependent upon the severity of the excursion, corrective action shall not exceed 8 hours from the time of discovery. The baghouse shall shutdown for visual inspection within 24 hours and bags shall be replaced as needed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

Stationary Asphalt Plant (027-14746-03270):

D.3.28 Record Keeping Requirements

The owner or operator shall keep:

- (a) either:
 - (1) a copy of the sampling and analysis test results as specified in Condition D.3.21(a)(1),
 - (2) a copy of the sampling and analysis test results as specified in Condition D.3.21(a)(2), or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.3.16(a)(3), copies of the certifications required in Condition D.3.21(a)(3);
- (b) records of the fuel oil properties required in Condition D.3.21(b);
- (c) records of the amount of fuel combusted, as required in Condition D.3.21(c);
- (d) records of the grade(s) of cold mix (cutback) asphalt used and total amount of cold mix (cutback) asphalt binder used, as required in Condition D.3.22;
- (e) records of all visible emission notations from the scrubber/cyclone system as required in Condition D.3.23; and
- (f) records of all required pressures and water flow rate recordings from the scrubber/cyclone system while the stationary asphalt plant is in operation, as required in Condition D.3.24.

All records required to be kept in this Condition shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.29 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.4, D.1.5, D.3.4, and D.3.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using reporting forms 1 and 2, respectively, located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Portable Asphalt Plant (025-7575-05023, issued August 4, 1997):

D.3.30 Record Keeping Requirements

The owner or operator shall keep:

- (a) either:
 - (1) a copy of the sampling and analysis test results as specified in Condition D.3.25(a)(1).
 - (2) a copy of the sampling and analysis test results as specified in Condition D.3.25(a)(2), or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.3.20(a)(3), copies of the certifications required in Condition D.3.25(a)(3);
- (b) records of the fuel oil properties required in Condition D.3.25(b);
- (c) records of the amount of fuel combusted, as required in Condition D.3.25(c);
- (d) records of all visible emission notations from the baghouse, cyclone, scavenger ductwork system as required in Condition D.3.26; and
- (e) records of all required baghouse/cyclone operational parameters while the portable asphalt plant is in operation, as required in Condition D.3.27.

All records required to be kept in this Condition shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.31 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.10 shall be submitted to the address listed in Section C - General Reporting Requirements, of the portable plant permit, using reporting form 1 located at the end of the portable plant permit, or their equivalent. Said quarterly report shall be submitted within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 46 of 50 OP No. F027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE BRANCH**

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **CERTIFICATION**

Source Name: Rogers Group, Inc.

412 Clark Road, Washington, Indiana 47501 412 Clark Road, Washington, Indiana 47501 Source Address: Mailing Address:

FESOP No.: 027-14746-03270	
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.	
Please check what document is being certified:	
9 Annual Compliance Certification Letter	
9 Test Result (specify)	
9 Report (specify)	
9 Notification (specify)	
9 Affidavit (specify)	
9 Other (specify)	
I certify that, based on information and belief formed after reasonable inquiry, the statements an information in the document are true, accurate, and complete.	d
Signature:	
Printed Name:	
Title/Position:	
Date:	

Rogers Group, Inc.

Page 47 of 50
Washington, Indiana
OP No. F027-14746-03270
Permit Reviewer: SDF

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

412 Clark Road, Washington, Indiana 47501

Rogers Group, Inc.

Source Name:

Source Address:

gregate Dryer Burner
Year: Page 1 of 2
et all the requirements stated in this permit. This indar year. Any deviation from the requirements, if the deviation, and the response steps taken must pred by an applicable requirement shall be applicable requirement and do not need to be tached if necessary. If no deviations occurred, eccurred this reporting period".
NG PERIOD.
HIS REPORTING PERIOD
Duration of Deviation:
Duration of Deviation:

Page 48 of 50 OP No. F027-14746-03270

Page 2 of 2

	1 uge 2 of 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	
Attach a signed certification to comp	plete this report.

Page 49 of 50 OP No. F027-14746-03270

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Quarterly Report Form; Stationary Asphalt Plant Monthly Fuel Use Limits Form 1

			1 01111 1			
Source Na Source Ad Stationary Facility:		Rogers Group, 412 Clark Road 027-14746-032 Aggregate Drye	d, Washington 270	, Indiana 4750	1	
Stationar	y Plant Limits:	YEA	AR:			
Annual Lii Monthly L	imit: 121,088 ga	gallons equivale illons equivalent itionary plant.				
Report:						
Month	Portable and Stationary Plants Co-located? (Y/N)	(1) Equivalent Combined No. 1 and No. 2 Fuel Oil Combusted* (gallons)	(2) Equivalent Natural Gas Combusted** (gallons)	(3) Equivalent No. 4 Fuel Oil Combusted*** (gallons)	(4) Re-refined Oil Combusted (gallons)	[(1) + (2) + (3) + (4)] Total Fuel Oil Combusted This Month (gallons)
Equation	s for Determinin	g Equivalent Us	<u>se</u> :			
** G	9 Deviati	2 Oil Combined il riation occurred in only occurred in	this quarter.	542 = Ga	llons Re-refined llons Re-refined llons Re-refined	Oil
	Deviati	on has been rep	orted on:			
	Submitted Title / Posit Signature: Date: Phone:					

Attach a signed certification to complete this report.

Page 50 of 50 OP No. F027-14746-03270

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Quarterly Report Form; Stationary Asphalt Plant Monthly Cold Mix (Cutback) Asphalt Binder Limit Form 2

Source Name: Source Address: Stationary Plant FESOP: Facility:	Rogers Group, Inc. 412 Clark Road, Washington, Indiana 027-14746-03270 Aggregate Dryer Burner	a 47501
	YEAR:	_
Stationary Plant Limits:		
Annual Binder Input Limit:	691 tons input cutback asphalt bi	nder per year.
Report:		
Month	Grade(s) of Cold Mix (Cutback) Asphalt Produced This Month (slow, medium, and/or rapid cure)	Amount of Input Binder Used to Produce Cutback Asphalt This Month (tons/month)
9 De	o deviation occurred in this quarter. eviation/s occurred in this quarter. eviation has been reported on:	
Title / Signa Date: Phone	Position:ture:	report

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Rogers Group, Inc.

Source Location: 412 Clark Road, Washington, Indiana 47501

County: Daviess SIC Code: 2951

FESOP Permit No.: 027-14746-03270

Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed a new source Federally Enforceable State Operating Permit (FESOP) application from Rogers Group, Inc. relating to the operation of their recently revoked batch hot mix asphalt plant.

Background

On June 12, 2001, Rogers Group, Inc. submitted an application to co-locate existing portable asphalt plant (F 055-7575-05023, issued on August 4, 1997) at the site of existing stationary asphalt plant (F 027-7578-03270, issued on July 1, 1997). The stationary source is located at 412 Clark Road, in Washington, Indiana 47501.

Relocating the portable asphalt plant at the site of the stationary plant required an alternative operating scenario be drafted for both asphalt plants. Incorporating the alternative operating scenarios into the respective permits required a significant permit revision to each plant's FESOP.

During the review process, Rogers Group, Inc. determined that the amount of time required to obtain the significant permit revisions was too great and that the source could not wait for the co-location permitting process to be completed. After discussing the matter with the Office of Air Quality, Rogers Group, Inc. submitted a letter requesting that the stationary plant FESOP (F 027-7578-03270, issued on July 1, 1997) be revoked, and continued with the permitting processes involved with allowing the relocation and the operation of the portable plant to the site of the stationary source.

As a result of the revocation, the smaller stationary plant was shut down and the larger portable plant granted a relocation approval letter which resulted in the portable source moving to the site of the existing stationary source where the portable plant is currently operating under its approved FESOP.

On July 31, 2001, Rogers Group. Inc. submitted this new proposed application to re-permit the stationary source. Re-permitting the proposed source, requires a new FESOP be drafted for the plant. The source shall be considered a "new" source with a new permit number being assigned (14746). The plant ID, however, will still be the stationary source's previous DOT ID number (03270). This proposed FESOP shall contain the new source provisions and an alternative operating scenario that allows the source proposed under this FESOP to be co-located and co-operated with the existing portable plant.

In addition to the requirements of the proposed stationary plant, changes also need to be made to the existing portable plant FESOP.

The changes to the portable plant FESOP include re-evaluating and updating the emission calculations utilizing the most current emission factors, establishing a new "source" fuel use limit, and establishing a new fuel use alternative operating scenario limit that combined with the limitations of this proposed stationary plant, maintain the combined emission levels of all applicable pollutants at FESOP levels. The new source fuel use limit and alternative operating scenario limit shall be incorporated into the portable plant FESOP via a significant permit revision pursuant to 326 IAC 2-8-15(d) which states an owner or operator of a FESOP source may request that a valid FESOP permit be revised to include an alternative operating scenario in accordance with the significant permit revision requirements under 326 IAC 2-8-11.1(f).

The alternative operating scenario proposed for the portable plant shall be the same as the alternative operating scenario of the proposed stationary plant FESOP.

Both the new proposed FESOP and significant permit revision shall require a 30 day public comment period. To satisfy the public notification requirements of both the proposed FESOP and significant permit revision, one public notice shall be drafted with both proposals undergoing public notice at the same time. Simultaneous public noticing is required because both the new proposed permit and significant permit revision are dependent upon each other and they pertain to the same source site.

Rogers Group, Inc. has also submitted a FESOP renewal application for the portable plant (027-14791-05023). Since the changes associated with the portable plant significant permit revision (027-14825-05023) need to be incorporated into the renewed FESOP permit, the proposed renewal application shall be put on hold (prior to public notification) until the significant permit revision has been issued. Upon issuance, the changes associated with the significant permit revision shall be incorporated into the proposed portable plant renewal ensuring that the renewal reflects the most current standards and requirements.

Proposed Stationary Asphalt Plant Co-location Determination:

Based on the allowable SO2 rate of 99 tons/yr, the estimated fuel use limit for the stationary plant when operating alone is determined to be 2,639,733 gallons of equivalent re-refined oil per year. After application of this limit, only the VOC emissions exceed the Part 70 thresholds.

Based on the allowable VOC emission rate of 99 tons per year, the amount of cutback asphalt binder (oil distillates (solvents) + asphalt cement) from the stationary plant is limited to 691 tons per year when the stationary plant is operating alone and when the stationary and portable plants are operating at the same time, and the grade of cutback asphalt allowed is limited to slow or medium cure production. The portable plant will not produce any cutback asphalt. After application of this limit, no applicable pollutant emissions exceed their respective Part 70 thresholds. Thus, 326 IAC 2-7 will not apply in this case.

Based on the stationary plant alternative operating scenario allowable SO2 emission rate of 54.5 tons/yr, the adjusted portable plant fuel use limit under the alternative operating scenario is determined to be 1,453,066 gallons of equivalent re-refined fuel oil per year. Since the portable plant can relocate at any time, this annual limit is reduced to a straight monthly limit of 121,088 equivalent gallons of re-refined oil per month.

Complying with this adjusted proposed fuel use limit, complying with the cutback asphalt binder usage limit, complying with the other requirements of the stationary plant FESOP (including the new alternative operating scenario), and complying with the requirements of the portable plant FESOP and its alternative operating scenario, result in combined source emissions less than their respective Part 70 major source levels. Thus, 326 IAC 2-7 will not apply in this case.

Portable Asphalt Plant Determination:

Based on the allowable SO2 rate of 99 tons/yr, the re-estimated fuel use limit for the portable plant when operating alone is determined to be 2,713,521 gallons of equivalent No. 1/No. 2 fuel oil per year. After application of this limit, no source pollutant emissions exceed their respective Part 70 thresholds. Thus, 326 IAC 2-7 will not apply in this case.

Based on the portable plant alternative operating scenario allowable SO2 emission rate of 44.5 tons/yr, the adjusted portable plant fuel use limit under the alternative operating scenario is determined to be 1,178,309 gallons of equivalent No. 1/No. 2 fuel oil per year. Since the portable plant can relocate at any time, this annual limit is reduced to a straight monthly limit of 98,192 equivalent gallons of No. 1/No. 2 fuel oil per month.

Complying with this adjusted proposed fuel use limit, complying with the other requirements of the portable plant FESOP (including the new alternative operating scenario), and complying with the requirements of the proposed stationary plant FESOP and its alternative operating scenario, result in combined source emissions less than their respective Part 70 major source levels. Thus, 326 IAC 2-7 will not apply in this case.

Existing Approvals

This stationary asphalt plant was issued a FESOP (027-7578-03270) on July 1, 1997. The permit was revoked on August 3, 2001. The proposed FESOP (027-14746-03270) is the most recent version of the permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that this FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application.

Emission Calculations

UNRESTRICTED POTENTIAL TO EMIT, STATIONARY PLANT ALONE:

The following is a summary of the source unrestricted potential to emit (UPTE). The detailed calculations follow the summary.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Dryer Combustion	70.34	60.74	159.86	51.45	2.13	10.81
Heater	0.17	0.17	0.01	1.74	0.04	0.44
Aggregate Dryer	16819	2365	-	-	-	-
Conveying/Handling	8.52	0.85	-	-	-	-
Unpaved Roads	6.20	2.20	-	-	-	ı
Storage	0.45	0.16	-	-	-	ı
Storage Tanks	-	-	-	-	neg.	ı
Cutback Asphalt Emissions	-	-	-	-	44676	-
Total	16904.68	2429.12	159.87	53.19	44678.17	11.25

1. <u>Dryer Combustion Emissions</u>:

The fuels to be combusted by the dryer burner are natural gas, No. 1/No. 2 fuel oil, # 4 fuel oil, and re-refined oil. The following calculations determine the worst case UPTE due to the combustion of these fuels.

Natural Gas Combustion:

The following calculations determine the dryer combustion unrestricted potential to emit (UPTE) based on natural gas combustion, a maximum capacity of 69.1 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation:

69.1 MMBtu/hr * 8760 hr/yr * Ef lb/MMBtu * 1/1000 Btu/cf * 1/2000 ton/lb = tons Poll/yr

	PM	PM10	SO2	NOx	VOC	CO
	13.7 lb/MMcf	13.7 lb/MMcf	0.6 lb/MMcf	170 lb/MMcf	2.8 lb/MMcf	35 lb/MMcf
ton/yr	4.15	4.15	0.18	51.45	0.85	10.60

No. 1/No. 2 Fuel Oil Combustion:

The following calculations determine the UPTE based on No. 1/No. 2 fuel oil combustion, 0.5% sulfur, a maximum capacity of 69.1 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

69.1 MMBtu/hr * 8760 hr/yr * 1/0.14 gal/MMBtu * 1/(1000) * Ef lb/ gal * 1/2000 tons/lb = tons/yr

ton/yr	4.32	2.16	153.49	43.37	0.43	10.81
	PM	PM10	SO2	NOx	VOC	CO
	2 lb/ 1000 gal	1 lb/ 1000 gal	71lb/1000 gal	20 lb/1000 gal	.2 lb/1000 gal	5 lb/1000 gal

No. 4 Oil Combustion:

The following calculations determine the UPTE based on No. 4 fuel oil combustion, 0.5% sulfur, a maximum capacity of 69.1 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

69.1 MMBtu/hr * 8760 hr/yr * 1/0.146 gal/MMBtu * 1/(1000) * Ef lb/ gal * 1/2000 tons/lb = tons/yr

	PM	PM10	SO2	NOx	VOC	CO
	7 lb/1000 gal	6 lb/1000 gal	75lb/1000 gal	20 lb/1000 gal	.2 lb/1000 gal	5 lb/1000 gal
ton/yr	14.51	12.44	155.48	41.46	0.41	10.37

Re-refined Oil Combustion:

The following calculations determine the UPTE based on re-refined oil combustion, 0.5% sulfur, a maximum capacity of 69.1 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

69.1 MMBtu/hr * 8760 hr/yr * 1/0.142 gal/MMBtu * 1/ lb/1000 gal * 1/2000 tons/lb = tons/yr

	PM 33.00 lb/1000 gal	PM10 28.5 lb/1000 gal	SO2* 75 lb/1000 gal	NOx 20 lb/1000 gal	VOC 1 lb/1000 gal	CO 2.1 lb/1000 gal
t/y	70.34	60.74	159.86	42.63	2.13	4.48

^{*} Due to the poor rating given to the re-refined oil emission factors (D rating), the more reliable factor of No. 4 fuel oil, 150 lb/Tgal (A rating) was used.

Summary of Dryer Combustion UPTE:

The following table is a summary of the unrestricted potential to emit (UPTE) from the combustion of each of the dryer fuels.

The worst case emissions from any of the fuels to be combusted is identified in bold type.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Natural Gas	4.15	4.15	0.18	51.45	0.85	10.60
No. 1/No. 2 Fuel Oil	4.32	2.16	153.49	43.37	0.43	10.81
No. 4 Fuel Oil	14.51	12.44	155.48	41.46	0.41	10.37
Re-refined Oil	70.34	60.74	159.86	42.63	2.13	4.48

2. Heater Emissions:

The following calculations determine the heater UPTE based on natural gas combustion, a maximum capacity of 2.84 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

Page 6 of 32 F 027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

2.84 MMBtu/hr * 8760 hr/yr * Ef lb/MMBtu * 1/1000 Btu/cf * 1/2000 ton/lb = tons Poll/yr

	PM	PM10	SO2	NOx	VOC	CO
	13.7 lb/MMcf	13.7 lb/MMcf	0.6 lb/MMcf	140 lb/MMcf	2.8 lb/MMcf	35 lb/MMcf
ton/yr	0.17	0.17	0.01	1.74	0.04	0.44

3. Aggregate Drying Emissions, Batch Mix Plant:

The following calculations determine the UPTE based on EPA SCC#3-05-002-05 emission factors, a maximum rate of 120 tons per hour, emissions before controls, and 8760 hours of operation.

120 tons/hr * Ef lb/ton * 1/2000 ton/lb * 8760 hr/yr = tons Poll/yr

ton/yr	16819	2365	0.002	3.05
	PM	PM10	Lead	HAPs*
	32 lb/ton	4.5 lb/ton	3.3 E-6 lb/ton	0.0058 lb/ton

^{*} HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene, arsenic, cadmium, chromium, manganese, mercury, and nickel.

4. Conveying/Handling Emissions:

The following calculations determine the UPTE based on material handling of aggregate, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

Ef = $0.0032 * [(u/5)^1.3 * k] / [(m/2)^1.4] = 0.014 lb/ton$

where: k = 1 (particle size multiplier)

u = 12 mi/hr mean wind speed (worst case)

m = 1.6% moisture

PM = 0.014 lb/ton * 142.5 tons/hr * 8760 hr/yr * 1/2000 tons/lb = **8.52 tons/yr** PM10 = 0.10 * 8.52 tons/yr = **0.85 tons/yr**

5. Unpaved Roads:

a. Tri-axle Trucks:

The following calculations determine the UPTE based on 22.5 trips/hr, 0.03 miles/roundtrip, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

22.5 trips/hr * 0.03 mi/roundtrip * 8760 hr/yr = 5913.0 mi/yr Ef = $k * 5.9 * (s/12) * (S/30) * (W/3)^0.7 * (w/4)^0.5 * ((365 - p)/365) = 1.83 lb/mi$

where: k = 0.8 (particle size multiplier)

s = 4.8% silt content of unpaved roads p = 125 days of rain greater than 0.01 in

S = 5.0 mi/hr vehicle speed W = 27.50 tons avg. vehicle wt.

Page 7 of 32 F 027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

w = 14 wheels

PM = 1.83 lb/mi * 5913 mi/yr * 1/2000 ton/lb = **5.4 tons/yr** PM10 = 0.35 * 5.4 tons/yr = **1.9 tons/yr**

b. Front End Loader:

The following calculations determine the UPTE based on AP-42 emission factors, emissions before controls, and 8760 hours of operation.

5.0 trips/hr * 0.045 mi/roundtrip * 8760 hr/yr = 1971 mi/yr

Ef = $k * 5.9 * (s/12) * (s/30) * (w/3)^0.7 * (w/4)^0.5 * ((365 - p)/365) = 1.83 lb/mi$

where: k = 0.8 (particle size multiplier)

s = 4.8% silt content of unpaved roads p = 125 days of rain greater than 0.01 in

S = 5.0 mi/hr vehicle speed W = 22.50 tons avg. vehicle wt.

w = 14 wheels

PM = 0.85 lb/mi * 1971 mi/yr * 1/2000 ton/lb = **0.8 tons/yr** PM10 = 035 * 0.8 tons/yr = **0.3 tons/yr**

6. Storage:

The following calculations determine the storage UPTE based on the maximum storage capacities, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

```
Ef = 1.7 * (s/1.5) * [(365 - p) / 235] * (f/15) = lb/acre/day aggregate
```

sand = 1.74 lb/acre/day sand stone = 1.16 lb/acre/day stone RAP = 1.16 lb/acre/day RAP

where: s = 1.5% silt for sand

s = 1.0% silt for stone s = 1.0% silt for RAP

p = 125 days of rain greater than or equal to 0.01 in f = 15% of wind greater than or equal to 12 mph

Ep (storage) = [Ef * sc * (20 cf/ton) * 365 day/yr] / [2000 lb/ton * 43560 sqft/acre * 25 ft]

= 0.17 tons/yr for sand

= 0.23 tons/yr for stone = 0.04 tons/yr for RAP

= 0.45 tons PM/yr total

where: sc = 30,000 tons storage capacity for sand

sc = 60,000 tons storage capacity for stone sc = 10,000 tons storage capacity for RAP

PM10 = 0.35 * 0.45 tons PM/yr = 0.16 tons PM10/yr

7. Storage Tank Emissions:

The storage tanks generate VOC and HAP emissions. The VOC and HAP UPTE of all the tanks combined, as determined by the EPA "Tanks 4" program are determined to be negligible.

8. Cutback Asphalt Production Emissions:

The following calculations determine the VOC UPTE from the production of cutback asphalt based on a maximum hourly cutback asphalt production rate of 120 tons per hour, medium cure asphalt production, a maximum dilutent content of 25%, 8,760 hours of operation, AP-42 emission factors, and emissions before controls.

120 tons asphalt/hr * 8760 hr/yr = 1,051,200 tons asphalt/yr

Tons VOC/yr = Ef (0.17 tons VOC/ton dilutent) * 0.25 tons dilutent/ton asphalt * 1051200 tons asphalt = 44,676 tons VOC/yr

EMISSIONS AFTER CONTROLS, STATIONARY PLANT ALONE:

The following is a summary of the emissions after controls. The detailed calculations follow the summary.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Dryer Combustion	0.07	0.06	159.86	51.45	2.13	10.81
Heater	0.17	0.17	0.01	1.74	0.04	0.44
Aggregate Dryer	16.82	2.37	-	-	-	-
Conveying/Handling	8.52	0.85	-	-	-	-
Unpaved Roads	3.12	1.09	-	-	-	-
Storage	0.23	0.08	-	-	-	-
Storage Tanks	-	-	-	-	neg.	-
Cutback Asphalt Emissions	-	-	-	-	44676	-
Total	28.93	4.62	159.87	53.19	44678.17	11.25

The SO2 and VOC emissions after controls exceed the Part 70 major source level of 100 tons per year.

1. <u>Dryer Combustion Emissions</u>:

The worst case PM and PM10 emissions are controlled with an overall efficiency of 99.9%.

PM = 70.34 tons/yr * 0.001 = 0.07 ton/yrPM10 = 60.74 tons/yr * 0.001 = 0.06 ton/yr

2. Aggregate Drying Emissions:

The aggregate dryer PM/PM10 emissions are controlled with an overall efficiency of 99.9%.

PM = 16819 tons/yr * 0.001 = 16.82 tons/yr

Page 9 of 32 F 027-14746-03270

Rogers Group, Inc. Washington, Indiana Permit Reviewer: SDF

PM10 = 2365 tons/yr * 0.001 = 2.37 tons/yr

3. Conveying/Handling Emissions:

The conveying/handling emissions are uncontrolled.

4. Unpaved Roads:

The PM/PM10 emissions are controlled with an overall efficiency of 50%.

```
PM = 6.23 tons/yr * 0.50 = 3.12 tons/yr
PM10 = 2.18 tons/yr * 0.50 = 1.09 tons/yr
```

5. Storage Emissions:

The PM/PM10 emissions are controlled with an overall efficiency of 50%.

```
PM = 0.45 tons/yr * 0.50 = 0.23 tons/yr
PM10 = 0.16 tons/yr * 0.50 = 0.08 tons/yr
```

6. Heater:

The heater emissions are uncontrolled.

7. Storage Tanks:

The storage take emissions are uncontrolled.

8. Cutback Asphalt Production Emissions:

The cutback asphalt VOC UPTE is uncontrolled.

CUTBACK ASPHALT PRODUCTION LIMITATION, STATIONARY PLANT:

To limit the source volatile organic compound (VOC) emissions from the stationary plant to less than the Part 70 levels of 100 tons per year, the annual binder usage rate shall be limited such that the VOC emissions associated with cut back asphalt production are 99 tons per year less the VOC emissions from the rest of the source (2.17 tons VOC/yr).

```
99 tons VOC/yr - 2.17 tons VOC/yr = 96.83 tons VOC/yr
```

The following calculations determine the cutback asphalt binder usage limit based on production of medium cure asphalt*, a maximum dilutent content of 25%, the AP-42 emission factor of 0.14, and the allowable VOC emission rate of 96.83 tons VOC/yr.

* Rogers has stated that their cutback asphalt produced can range from being slow to medium cure. Thus, the emission factor for the worst case scenario (medium cure) was used.

```
0.14 tons VOC/ton dilutent * X tons dilutent/yr = 96.83 tons VOC/yr X = 691 tons binder (asphalt cement + solvent) per year.
```

The binder shall therefore be limited to slow and medium production and 691 tons binder/yr where the binder is the sum of the oil distillates (solvent) and asphalt cement.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Rest of Source	28.93	4.62	159.87	53.19	2.17	11.25
Cutback Asphalt Emissions	-	-	1	-	96.83	-
Total	28.93	4.62	159.87	53.19	99.00	11.25

After application of emission controls and the cutback asphalt binder limit of 691 tons per year, only the SO2 emissions exceed the Part 70 major source level of 100 tons per year.

Note: the portable plant will not produce any cutback asphalt.

FUEL USE LIMIT, STATIONARY PLANT ALONE:

1. Allowable SO2 Emission Rate:

Since the proposed stationary plant SO2 emissions exceed the Part 70 applicable level of 100 tons per year, a fuel use limit must be established to reduce the source SO2 emissions to below the Part 70 applicable level of 100 tons per year.

2. Adjusted Allowable Emission Rate for Dryer Combustion Fuel Use Limit:

The fuel use limit to be established, shall be for the dryer burner only. The stationary plant has one other source of SO2 emissions, the oil heater, which generates SO2 UPTE of 0.01 tons/yr.

Therefore, the adjusted allowable emission rate that will be used to determine the fuel use limit for the dryer burner is 98.99 tons SO2/yr.

99.00 tons SO2/yr - 0.01 tons SO2/yr = 98.99 tons SO2/yr

3. Fuel Use Limit for Dryer Burner:

Based on the adjusted allowable SO2 emission rate for the dryer burner, the fuel limit is determined. Re-refined oil is the worst case fuel for SO2 at the stationary plant so the fuel use limit shall be determined for re-refined oil.

98.99 tons SO2/yr * 2000 lb SO2/ton SO2 * 1/75 Tgal/lb SO2 * 1000 gal/Tgal = 2,639,733 gal/yr

4. Stationary Plant Dryer Emissions After Fuel Use Limit, After Controls:

The following calculations determine the emissions generated after the fuel use limit. The PM/PM10 emissions are controlled with an overall efficiency of 99.9%.

Re-refined Oil:

The following calculations determine the emissions associated with re-refined oil, after the fuel use limit:

2,639,733 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM	PM10	SO2	NOx	VOC	CO
	33.00 lb/1000 gal	28.5 lb/1000 gal	75 lb/1000 gal	20 lb/1000 gal	1 lb/1000 gal	2.1 lb/1000 gal
t/y	0.04	0.04	98.99	26.40	1.32	2.77

Natural Gas:

The following calculations determine the emissions associated with natural gas, after the fuel use limit.

2,639,733 gal/yr * 142,000 Btu/gal * 1/1000 cf/Btu = 374,842,086 cf/yr

The following calculations determine the emissions associated with the equivalent fuel use limit:

374,842,086 cf/yr * 1/1E6 MMcf/cf * Ef lb Poll/MMcf * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM 13.7 lb/MMcf	PM10 13.7 lb/MMcf	SO2 0.6 lb/MMcf	NOx 170 lb/MMcf	VOC 2.8 lb/MMcf	CO 35 lb/MMcf
ton/yr	neg.	neg.	0.11	31.86	0.52	6.56

No. 1/No. 2 Fuel Oil:

The following calculations determine the equivalent fuel limit for No. 1/No. 2 fuel oil.

2,639,733 gal/yr * 142,000 Btu/gal * 1/138,000 gal/Btu = 2,716,247 gal/yr

The following calculations determine the emissions associated with the equivalent fuel use limit:

2,716,247 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

		PM 2 lb/ 1000 gal	PM10 1 lb/ 1000 gal	SO2 71lb/1000 gal	NOx 20 lb/1000 gal	VOC .2 lb/1000 gal	CO 5 lb/1000 gal
1	ton/yr	neg.	neg.	96.43	27.16	0.27	6.79

No. 4 Fuel Oil:

The following calculations determine the equivalent fuel limit for No. 4 fuel oil.

2,639,733 gal/yr * 142,000 Btu/gal * 1/146,000 gal/Btu = 2,567,411 gal/yr

The following calculations determine the emissions associated with the equivalent fuel use limit:

2,567,411 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM 7 lb/1000 gal	PM10 6 lb/1000 gal	SO2 75lb/1000 gal	NOx 20 lb/1000 gal	VOC .2 lb/1000 gal	CO 5 lb/1000 gal
ton/yr	0.01	0.01	96.28	25.67	0.26	6.42

5. Worst Case Dryer Combustion Emissions After Fuel Use Limit:

The following is a summary of the worst case pollutant emissions generated by combustion of all fuels combusted at the stationary plant. The worst case pollutant emissions are listed in bold type.

Stationary Plant	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAPs tons/yr
Re-refined Oil	0.04	0.04	98.99	26.40	1.32	2.77	2.86
Natural Gas	neg.	neg.	0.11	31.86	0.52	6.56	0.23
No. 1 or No. 2 Oil	neg.	neg.	96.43	27.16	0.27	6.79	2.42
No. 4 Oil	0.01	0.01	96.28	25.67	0.26	6.42	2.48

6. Stationary Plant Source Emissions After Controls, After New Fuel Use Limit:

The following is a summary of the stationary plant source emissions after controls, after application of all limits.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAPs tons/yr
Dryer Combustion	0.04	0.04	98.99	31.86	1.32	6.79	2.86
Heater	0.17	0.17	0.01	1.74	0.04	0.44	neg.
Aggregate Dryer	16.82	2.37	1	1	-	1	-
Conveying/Handling	8.52	0.85	1	1	-	1	-
Unpaved Roads	3.12	1.09	-	-	-	-	-
Storage	0.23	0.08	1	1	-	1	-
Storage Tanks	-	-	1	1	neg.	1	neg.
Cutback Asphalt	-	-	-	-	96.83	-	-
Total	28.90	4.60	99.00	33.60	98.19	7.23	2.86

After application of emission controls, the cutback asphalt binder usage limit, and the dryer fuel use limit, no pollutant emissions exceed their respective applicable Part 70 thresholds.

FUEL USE LIMIT, STATIONARY PLANT UNDER ALTERNATIVE OPERATING SCENARIO:

The fuel use limit to be established for the proposed stationary plant shall be based on the combined allowable emissions from both the proposed stationary and existing portable asphalt plants, as submitted by Rogers Group. The allowable SO2 rate for the portable plant, as submitted by Rogers Group, is 44.5 tons/yr.

1. Allowable SO2 Emission Rate:

Since the proposed stationary and existing portable plant SO2 emissions exceed the Part 70 applicable level of 100 tons per year, separate fuel use limits must be established for the portable and stationary plants to reduce the combined emissions to below the Part 70 applicable level of 100 tons per year.

Based on the combined allowable rate of 99 tons per year and the portable plant SO2 allowable emission rate of 44.5 tons per year submitted by Rogers Group, Inc., the allowable rate to be used to determine the stationary plant fuel use limit is determined as follows.

99 tons SO2/yr - 44.5 tons SO2/yr = 54.5 tons SO2/yr

2. Adjusted Allowable Emission Rate for Dryer Combustion Fuel Use Limit:

The fuel use limit to be established, shall be for the dryer burner only. The stationary plant has one other source of SO2 emissions, the oil heater, which generates SO2 UPTE of 0.01 tons/yr.

Therefore, the adjusted allowable emission rate that will be used to determine the fuel use limit for the dryer burner is 54.49 tons SO2/yr.

54.50 tons SO2/yr - 0.01 tons SO2/yr = 54.49 tons SO2/yr

3. Fuel Use Limit for Dryer Burner:

Based on the adjusted allowable SO2 emission rate for the dryer burner, the fuel limit is determined. Re-refined oil is the worst case fuel for SO2 at the stationary plant so the fuel use limit shall be determined for re-refined oil.

54.49 tons SO2/yr * 2000 lb SO2/ton SO2 * 1/75 Tgal/lb SO2 * 1000 gal/Tgal = 1,453,066 gal/yr

4. Stationary Plant Dryer Emissions After Fuel Use Limit, After Controls:

The following calculations determine the emissions generated after the fuel use limit. The PM/PM10 emissions are controlled with an overall efficiency of 99.9%.

Re-refined Oil:

The following calculations determine the emissions associated with re-refined oil, after the fuel use limit:

1,453,066 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM 33.00 lb/1000 gal	PM10 28.5 lb/1000 gal	SO2 75 lb/1000 gal	NOx 20 lb/1000 gal	VOC 1 lb/1000 gal	CO 2.1 lb/1000 gal
t/y	0.02	0.02	54.49	14.53	0.73	1.53

Natural Gas:

The following calculations determine the emissions associated with natural gas, after the fuel use limit.

1,453,066 gal/yr * 142,000 Btu/gal * 1/1000 cf/Btu = 206,335,372 cf/yr

The following calculations determine the emissions associated with the equivalent fuel use limit:

206,335,372 cf/yr * 1/1E6 MMcf/cf * Ef lb Poll/MMcf * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM 13.7 lb/MMcf	PM10 13.7 lb/MMcf	SO2 0.6 lb/MMcf	NOx 170 lb/MMcf	VOC 2.8 lb/MMcf	CO 35 lb/MMcf
ton/yr	neg.	neg.	0.06	17.54	0.29	3.61

No. 1/No. 2 Fuel Oil:

The following calculations determine the equivalent fuel limit for No. 1/No. 2 fuel oil.

1,453,066 gal/yr * 142,000 Btu/gal * 1/138,000 gal/Btu = 1,495,183.86 gal/yr The following calculations determine the emissions associated with the equivalent fuel use limit:

1,495,183.86 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999) PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM	PM10	SO2	NOx	VOC	CO
	2 lb/ 1000 gal	1 lb/ 1000 gal	71lb/1000 gal	20 lb/1000 gal	.2 lb/1000 gal	5 lb/1000 gal
ton/yr	neg.	neg.	53.08	14.95	0.15	3.74

No. 4 Fuel Oil:

The following calculations determine the equivalent fuel limit for No. 4 fuel oil.

1,453,066 gal/yr * 142,000 Btu/gal * 1/146,000 gal/Btu = 1,413,255.97 gal/yr

The following calculations determine the emissions associated with the equivalent fuel use limit:

1,413,255.97 gal/yr * 1/1000 Tgal/gal * Ef lb Poll/Tgal * 1/2000 ton Poll/lb Poll = ton Poll/yr

PM tons/yr, After Fuel Use Limit, After Controls = PM Before Controls (tons/yr) * (1 - 0.999)

PM10 tons/yr, After Fuel Use Limit, After Controls = PM10 Before Controls (tons/yr) * (1 - 0.999)

	PM	PM10	SO2	NOx	VOC	CO
	7 lb/1000 gal	6 lb/1000 gal	75lb/1000 gal	20 lb/1000 gal	.2 lb/1000 gal	5 lb/1000 gal
ton/yr	neg.	neg.	53.00	14.13	0.14	3.53

5. Worst Case Dryer Combustion Emissions After New Limit:

The following is a summary of the worst case pollutant emissions generated by combustion of all fuels combusted at the stationary plant. The worst case pollutant emission are listed in bold type.

Stationary Plant	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAPs tons/yr
Re-refined Oil	0.02	0.02	54.49	14.53	0.73	1.53	2.40
Natural Gas	neg.	neg.	0.06	17.54	0.29	3.61	0.26
No. 1 or No. 2 Oil	neg.	neg.	53.08	14.95	0.15	3.74	2.26
No. 4 Oil	neg.	neg.	53.00	14.13	0.14	3.53	2.29

6. Stationary Plant Source Emissions After Controls, After New Fuel Use Limit:

The following is a summary of the stationary plant source emissions after controls, after application of all limits.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAPs tons/yr
Dryer Combustion	0.02	0.02	54.49	17.54	0.73	3.74	2.40
Heater	0.17	0.17	0.01	1.74	0.04	0.44	neg.
Aggregate Dryer	16.82	2.37	1	-	1	1	-
Conveying/Handling	8.52	0.85	1	-	1	1	-
Unpaved Roads	3.12	1.09	1	-	1	1	-
Storage	0.23	0.08	-	-	-	-	-
Storage Tanks	-	-	1	ı	neg.	1	neg.
Cutback Asphalt	-	-	-	-	96.83	-	-
Total	28.88	4.58	54.50	19.28	97.60	4.18	2.40

CUTBACK ASPHALT PRODUCTION LIMIT, STATIONARY PLANT UNDER ALTERNATIVE OPERATING SCENARIO:

No separate cutback asphalt binder usage limit shall be established for the stationary plant under the alternative operating scenario because the combined portable and stationary plant VOC emissions after controls and all other limitations is still approximately 99 tons/yr.

	VOC tons/yr
Portable Plant	0.24
Stationary Plant Cutback Asphalt	96.83
Rest of Stationary Plant	0.77
Total	97.84

FUEL USE LIMIT, PORTABLE PLANT UNDER ALTERNATIVE OPERATING SCENARIO:

The portable plant fuel use limit and associated source emissions under the alternative operating scenario, as obtained from the Technical Support Document (TSD) of Significant Permit Revision (027-14825-05023) are as follows:

7. Portable Plant Fuel Use Limit Under the Alternative Operating Scenario:

The portable plant fuel use limit under the alternative operating scenario is determined to be 98,192 equivalent gallons of No. 1/No. 2 fuel oil per month.

8. Portable Source Emissions After Limits Under the Alternative Operating Scenario:

The source emissions after all limits under the alternative operating scenario are as follows:

Portable Plant	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAPs tons/yr
Drum Burner	neg.	neg.	41.83	14.22	0.23	2.95	5.88
Aggregate Dryer	29.13	6.75	-	-	-	-	-
Convey/Handling	21.8	2.18	-	-	-	-	-
Storage	0.01	0.01	-	-	-	-	-
Unpaved Roads	3.10	1.10	-	-	-	-	-
Screening	45.90	4.59	-	-	-	-	-
Hot Oil Heater	0.08	0.04	2.67	0.75	0.01	0.19	neg.
Tanks	-	-	-	-	neg.	-	neg.
Total	100.02	14.67	44.50	14.97	0.24	3.14	5.88

PORT. AND STATIONARY PLANT EMISSIONS UNDER ALTERNATIVE OPERATING SCENARIO:

The following table lists the combined emissions after controls, after all limitations for the portable and proposed stationary plants.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Combined HAPs tons/yr
Portable	100.02	14.67	44.50	14.97	0.24	3.14	5.88
Stationary	28.88	4.58	54.50	19.28	97.60	4.18	2.40
Total	128.90	19.25	99.00	34.25	97.84	7.32	8.28

None of the pollutant emissions exceed their respective applicable Part 70 thresholds. Thus, no Part 70 permit is required as a result of the proposed co-location and co-operation of the existing portable and proposed stationary asphalt plants.

EQUATIONS FOR DETERMINING EQUIVALENT FUEL USE FOR OTHER FUELS COMBUSTED:

1. Stationary Plant Alone:

The fuel use limit for the stationary plant dryer burner alone is 2,639,733 gallons of equivalent rerefined oil per year. Since natural gas, No. 4 fuel oil, and No. 1/No. 2 fuel oil will also be combusted at the stationary plant dryer, an equation must be established for each of the alternative fuels so that records can be kept, reports sent, and compliance demonstrated.

The following calculations determine the equivalent equations for natural gas, No. 4 fuel oil, and rerefined oil.

a. Natural Gas:

374,842,086 cu ft * X = 2,639,733 gal, X = 0.007042254

Natural Gas Equation: Cubic Feet Natural Gas * 0.007042254 = gallons re-refined oil

b. No. 1/No. 2 Fuel Oil:

2,716,247 gal * X = 2,639,733 gal, X = 0.971831542

No. 1/No. 2 Fuel Oil Equation: Gallons No. 1/No. 2 Oil * 0.971831542 = gallons re-refined oil

c. No. 4 Fuel Oil:

2,567,411 gal * X = 2,639,733 gal, X = 1.028169722

No. 4 Fuel Oil Equation: Gallon No. 4 Fuel Oil * 1.028169722 = gallons re-refined oil

2. Stationary Plant Under Alternative Operating Scenario:

The fuel use limit for the stationary plant dryer burner under the alternative operating scenario is 1,453,066 gallons of equivalent re-refined oil per year. Since natural gas, No. 4 fuel oil, and No. 1/No. 2 fuel oil will also be combusted at the stationary plant dryer, an equation must be established for each of the alternative fuels so that records can be kept, reports sent, and compliance demonstrated.

The following calculations determine the equivalent equations for natural gas, No. 4 fuel oil, and rerefined oil.

a. Natural Gas:

206,335,372 cu ft * X = 1,453,066 gal, X = 0.007042254

Natural Gas Equation: Cubic Feet Natural Gas * 0.007042254 = gallons re-refined oil

b. No. 1/No. 2 Fuel Oil:

1,495,183 gal * X = 1,453,066 gal, X = 0.971831542

No. 1/No. 2 Fuel Oil Equation: Gallons No. 1/No. 2 Oil * 0.971831542 = gallons re-refined oil

c. No. 4 Fuel Oil:

1,413,255 gal * X = 1,453,066 gal, X = 1.028169722

No. 4 Fuel Oil Equation: Gallon No. 4 Fuel Oil * 1.028169722 = gallons re-refined oil

3. Portable Plant Alone:

The fuel use limit for the portable plant dryer burner is 2,713,521 gallons of equivalent No. 1/No. 2 fuel oil per year. Since natural gas is also combusted at the portable plant dryer, an equation must be established so that records can be kept, reports sent, and compliance demonstrated.

The following calculations determine the equivalent equation for natural gas:

385,319,982 cu ft * X = 2,713,521 gal, X = 0.007042254

Natural Gas Equation: Cubic Feet Natural Gas * 0.007042254 = gallons No. 1 or No. 2 Oil

4. Portable Plant Under Alternative Operating Scenario:

The fuel use limit for the portable plant dryer burner is 1,178,309 gallons of equivalent No. 1/No. 2 fuel oil per year. Since natural gas is also combusted at the portable plant dryer, an equation must be established so that records can be kept, reports sent, and compliance demonstrated.

The following calculations determine the equivalent equation for natural gas:

167,319,878 cu ft * X = 1,178,309 gal, X = 0.007042254

Natural Gas Equation: Cubic Feet Natural Gas * 0.007042254 = gallons No. 1 or No. 2 Oil

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE from the proposed stationary asphalt plant alone. The PTE in this table is the unrestricted PTE based on emissions before controls and limits, and is based on 8760 hours of operation. PTE, based on emissions after controls and after application of all limitations, occurs only after the controls and limits become federally enforceable.

Pollutant	Potential To Emit (tons/year)
PM	16904.68
PM-10	2429.12
SO ₂	159.87
VOC	44678.17
CO	11.25
NO _x	53.19

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Combined HAP Emissions	3.05 tons/yr
------------------------	--------------

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of the applicable PM10, SO2, and VOC are equal to or greater than 100 tons per year. Therefore, the these pollutants make the source subject to the provisions of 326 IAC 2-7 or 326 IAC 2-8.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of each single HAP is less than the applicable level of 10 tons per year, and the combined HAPs are less than the applicable level of 25 tons per year. Therefore, the these pollutants do no make the source subject to the provisions of 326 IAC 2-7 or 326 IAC 2-8.
- (c) Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, but the applicable NSPS (40 CFR 60, Subpart I) will be in effect after August 7, 1980.

County Attainment Status

The source is located in Daviess County.

Pollutant	Status
PM ₁₀	attainment or unclassifiable
SO ₂	attainment or unclassifiable
NO ₂	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Daviess County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2 and 40 CFR 52.21. (b) Daviess County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

1. New Source PSD Definition Without Alternative Operating Scenario:

Pollutant	Emissions (tons/year)
PM	28.90
PM10	4.60
SO ₂	99.00
VOC	98.19
CO	7.23
NO _x	33.60

- (a) The above emissions are based on emission after controls, with application of a fuel use limit of 2,639,733 equivalent gallons of re-refined oil per year. This fuel use limit is based on the stationary plant operating without the portable plant, with the limit being determined based on an allowable SO2 emission rate of 99 tons/yr, AP-42 emission factors, all worst case scenarios, and 8760 hours of operation.
- (b) The above emissions are also based on a stationary asphalt plant cutback asphalt binder usage limit of 691 tons per year, with the limit determined based on production of slow or medium cure asphalt, a maximum dilutent content of 25%, an AP-42 emission factor of 0.14, and an allowable VOC emission rate of 98.63 tons VOC/yr.
- (c) This proposed stationary plant is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (d) This proposed stationary plant is not a Title V major stationary source because no criteria pollutant PTE exceeds the applicable level of 100 tons per year, no single HAP PTE exceeds the applicable level of 10 tons per year, and the combined HAP PTE does not exceed the applicable level of 25 tons per year.

2. New Source PSD Definition Under Alternative Operating Scenario:

Pollutant	Emissions (tons/year)
PM	28.88
PM10	4.58
SO ₂	54.50
VOC	97.60
CO	4.18
NO _v	19.28
- 1	

Combination of HAPs	2.40

- (a) The above emissions are based on emission after controls, with application of a fuel use limit of 1,453,066 equivalent gallons of re-refined oil per year (121,088 gallons/month). This fuel use limit is based on the stationary plant simultaneously operating with the portable plant, with the limit being determined based on an allowable SO2 emission rate of 54.5 tons/yr for the stationary plant, an allowable SO2 emission rate of 44.5 tons/yr for the portable plant, AP-42 emission factors, all worst case scenarios, and 8760 hours of operation.
- (b) The above emissions are also based on the same stationary plant cutback asphalt binder usage limit of 691 tons per year, with the limit determined based on production of slow or medium cure asphalt, a maximum dilutent content of 25%, an AP-42 emission factor of 0.14, and an allowable VOC emission rate of 98.63 tons VOC/yr.
- (c) This proposed stationary plant under the alternative operating scenario is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (d) This proposed stationary plant under the alternative operating scenario is not a Title V major stationary source because no criteria pollutant PTE exceeds the applicable level of 100 tons per year, no single HAP PTE exceeds the applicable level of 10 tons per year, and the combined HAP PTE does not exceed the applicable level of 25 tons per year.

Federal Rule Applicability

- 1. New Source Performance Standards (NSPS):
 - a. Stationary Plant New Source Performance Standards (NSPS):
 - (1) 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities:

Pursuant to 40 CFR 60.90, Subpart I, Section 60.90(b), any affected facility under paragraph (a) of 60.90 of Subpart I which commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

Pursuant to 40 CFR 60.90(a), the affected facility to which this subpart apply are any combination of the following:

- (a) dryers,
- (b) systems for screening, handling, storing, and weighing hot aggregate,
- (c) systems for loading, transferring, and storing mineral filler,
- (d) systems for mixing hot mix asphalt, and
- (e) the loading, transfer, and storage systems associated with emission control systems.

Pursuant to 40 CFR 60.2:

- (a) construction is defined as fabrication, erection, or installation of an affected facility. Since the source is not fabricating, erecting, or installing an affected facility, as defined in 40 CFR 60, Subpart I, Section (a), the proposed new source is determined not to be construction.
- (b) a modification is defined as any physical change or change in method of operation of an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere previously emitted.
- (c) an existing facility is defined as any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Since the asphalt plant was constructed in 1968, prior to the date of the proposed standard, the stationary asphalt plant is determined to be an existing facility. Further, since the source is making a physical change in the method of operation of an existing facility which results in an increase in air pollutant emissions (adding No. 4 fuel oil and re-refined oil as fuel to be combusted at the dryer burner), the affected facility (the asphalt plant), is determined to be modified, and therefore applicable to 40 CFR 60, subpart I.

40 CFR 60.92 : Standard for Particulate Matter:

Pursuant to 40 CFR 60, Section 60.92, on and after the date the performance test, required in Condition D.1.9 (D.3.15) is completed, the owner or operator shall not discharge or cause to be discharged into the atmosphere, any gases from the asphalt plant which:

- (a) contain particulate matter (PM) greater than 0.04 gr/dscf, equivalent to 7.54 lb/hr, or
- (b) exhibit opacity greater than or equal to 20%.

40 CFR 60.93:Test Methods and Procedures:

Pursuant to 40 CFR 60.93(a) and (b), the owner or operator shall determine compliance with the particulate matter (PM) and opacity limits of Condition D.1.2 (D.3.2) by conducting performance tests as specified in 40 CFR 60, Section 60.8, utilizing the following test methods of Appendix A of Part 60:

- (a) Method 5 to determine the particulate matter concentration, with the sampling time and sample volume for each run being at least 60 minutes and 31.8 dscf, respectively, and
- (b) Method 9 and the procedures in 60.11 to determine opacity,

unless otherwise specified in 60.8.

These conditions shall be included in the compliance determination sections of both the asphalt plant and alternative operating scenarios, Sections D.1 and D.3, respectively.

(2) 40 CFR 60, Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978:

The three (3) storage tanks for emulsified asphalt and MC30 dust oil (TV2, TV3 and TV4) and the two (2) liquid asphalt storage tanks (TV5 and TV6) are not subject to NSPS, 326 IAC 12, 40 CFR 60.110b, Subpart K, because these tanks were constructed prior to June 11, 1973.

(3) 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984:

The No. 2 fuel oil storage tank, identified as TV8, although constructed in 2000, is not subject to any requirements of Subpart Kb because the tank capacity (1,000 gallons) is less than the least applicable level of 10,567 gallons.

The new proposed #2, #4, or re-refined oil storage tank, identified as Tank TV7, is not subject to any requirements of Subpart Kb because the tank capacity (10,000 gallons) is less than the least applicable level of 10,567 gallons.

b. Portable Plant NSPS Applicability Due to Proposed Co-Operation :

The proposed co-location will not trigger any new NSPS requirements or affect any existing NSPS requirements for the portable plant. However, the applicable NSPS (40 CFR 60, Subpart I) language of Condition D.3.19 has been added.

- 2. National Emission Standards for Hazardous Air Pollutants (NESHAP):
 - a. Stationary Plant National Emission Standards for Hazardous Air Pollutants (NESHAP):

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) applicable to the stationary asphalt plant.

b. Portable Plant NESHAP Applicability Due to Proposed Co-operation:

There are no NESHAPs that apply to the portable plant.

Entire State Rule Applicability

- 1. Stationary Asphalt Plant:
 - a. 326 IAC 2-8-4(FESOP):

Three limits have been established under 326 IAC 2-8-4. One general entire source limit pursuant to 326 IAC 2-8-4 is located in Section C. This limit requires all pollutant emissions to be less than their respective Part 70 thresholds.

Two fuel use limits under 326 IAC 2-8-4 have been established in the D sections because the stationary source SO2 emissions while operating alone exceed 100 tons/yr and the combined stationary and portable source co-located SO2 emissions exceed 100 tons per year.

The first limit establishes an annual aggregate dryer fuel use limit when the stationary plant is operating alone at its site. The annual limit established is 2,639,733 equivalent gallons of rerefined oil per year.

The second limit pertains to the alternative operating scenario (when the portable asphalt plant co-located with the stationary plant). The latter fuel use limit is a monthly limit based on the stationary plant adjusted allowable SO2 emission rate of 54.5 tons/yr. This limit associated with the adjusted allowable SO2 rate is determined to be 1,453,066 gallons equivalent re-refined oil per year (121,088 equivalent gallons of re-refined oil per month).

The annual limit shall be placed in Section D.1 because it pertains to the stationary plant at all times and the monthly limit shall be placed in Section D.3 because it reduces the monthly emissions during all months the portable plant is co-located with the stationary plant.

One other limit under 326 IAC 2-8-4 (cutback asphalt binder usage limit) has been established and placed in section D.1 to limit the stationary source VOC emissions and combined stationary and portable source co-located VOC emissions to less than the applicable level of 100 tons per year.

b. 326 IAC 1-6-3 (Preventive Maintenance Plan):

The source is required to have a preventive maintenance plan pursuant to 326 IAC 1-6-3.

c. 326 IAC 1-5-2 (Emergency Reduction Plans):

No emergency reduction plan under 326 IAC 1-5-2 of the proposed stationary plant is required because there are no pollutant emissions that exceed the applicable level of 100 tons/yr.

d. 326 IAC 2-6 (Emission Reporting):

This proposed stationary asphalt plant is not required to submit an emission report under 326 IAC 2-6 because the source PTE of carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NOx), PM10, and sulfur dioxide, each, are less than the applicable level of 100 tons per year.

e. 326 IAC 5-1 (Visible Opacity Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

f. 326 IAC 6-4 (Fugitive Emissions):

This rule applies to the proposed stationary asphalt plant because 326 IAC 6-4 applies to all sources of fugitive dust.

g. 326 IAC 6-5 (Fugitive Emissions):

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 13, 1996. The plan consists of:

- (1) Cleaning paved roads and parking lots by sweeping on an as needed basis (monthly minimum). Power brooming paced parking los while wet.
- (2) Paving unpaved roads with asphalt. Treating with emulsified asphalt as needed. Treating with water as needed. Double chip and seal the road surface and maintain on an as needed basis.
- (3) Maintain minimum size and number of stick piles of aggregate. Treat around the stockpile with emulsified asphalt on an as needed basis. Treat around the stockpile with water as needed. Treat stockpiles with water as needed.
- (4) Apply water at the feed and the intermediate points of the conveyors as needed.
- (5) Minimize the vehicular distance between transfer points of aggregates. Enclose the transfer points. Apply water to the transfer points on an as needed basis.
- (6) Tarp aggregate hauling vehicles. Maintain vehicle bodies to prevent leakages. Spray aggregates with water during transport. Maintain a 1 mile per hour speed limit in the yard.
- (7) Reduce free fall distance during loading and unloading of the aggregate. Reduce the rate of discharge of the aggregate. Spray the aggregate with water on an as needed basis.

h. 326 IAC 8-5-2 (Volatile Organic Compound (VOC) Limitations):

The proposed stationary asphalt is subject to 326 IAC 8-5-2 "Miscellaneous Operations, Asphalt Paving" because this rule applies to any paving application anywhere is the state. The following condition is placed in Section C because the rule applies to the entire source.

Pursuant to 326 IAC 8-5-2, the owner or operator shall not allow the use of asphalt emulsion containing more than seven percent (7%) oil distillate by volume emulsion, except as used for the following purposes:

- (a) Penetrating prime coating,
- (b) stockpile storage mix, and
- (c) application during the months of November, December, January, February, and March.

For the purposes of this condition, "asphalt emulsion" shall mean any dispersion of asphalt in water, optional additives, optional distillates, and emulsifying agents.

2. Portable Asphalt Plant:

The proposed co-location will not trigger any new entire state requirements or affect any of the existing entire state requirements for the portable source.

State Rule Applicability - Individual Facilities

3. Proposed Stationary Asphalt Plant:

a. 326 IAC 6-3-2 (Process Operations):

The asphalt manufacturing operations are subject to 326 IAC 6-3, Particulate Emission Limitations. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the manufacturing operations shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour. This limitation is based on the following:

$$E = 55.0 P^{0.11} - 40$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

$$E = 55.0 * (120)^{0.11} - 40 = 53.1 lb PM/hr$$

The PM emissions from the proposed stationary asphalt plant are estimated to be 28.88 tons/yr (6.6 lb PM/hr) which is less than the allowable rate of 53.1 lb PM/hr.

```
28.88 \text{ tons/yr} * 2000 \text{ lb/ton} * 1/8760 \text{ yr/hr} = 6.59 \text{ lb PM/hr}
```

Thus, compliance is determined to be achieved.

b. 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

This source is subject to the requirements of 326 IAC 7-1.1 because the potential to emit (PTE) of SO2 for the worst case fuel (159.86 tons per year) are greater than the applicable level of 25 tons per year.

SO2 Limits (326 IAC 7-1.1-2(a)):

The aggregate dryer burner SO2 emissions shall not exceed:

- (a) five-tenths (0.5) pound per million British thermal units when combusting No. 1 and No. 2 distillate oils; or
- (b) one and six-tenths (1.6) pounds per million British thermal units when combusting No. 4 fuel oil and re-refined oils .

Compliance Determination [326 IAC 326 IAC 7-2-1(e),(e)(2),(f); 326 IAC 3-7-4; 326 IAC 3-7-5(b)]:

The owner or operator shall determine compliance with the limits of Condition D.1.3 (D.3.3) by sampling and analyzing all distillate and fuel oils combusted at the stationary plant and computing the sulfur dioxide (SO2) emission rates utilizing the applicable sampling and analysis data collected. Said sampling, analyses, and computations shall be performed as follows:

(a) Fuel Sampling and Analysis Methods:

To sample and analyze all fuel oils combusted at the stationary asphalt plant, the owner or operator shall either:

- (1) utilize the following prescribed methods:
 - (A) The fuel oil samples shall be collected utilizing one of the following methods:
 - (i) ASTM D4057-88*, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products", or
 - (ii) ASTM D4177-82*, "Standard Method for Automatic Sampling of Petroleum and Petroleum Products":
 - (B) The sulfur content shall be determined utilizing one of the following methods:
 - (i) ASTM D129-95*, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)",
 - (ii) ASTM D1266-91*, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)",
 - (iii) ASTM D1552-95*, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)", or
 - (iv) ASTM D2622-94*, "Standard Test Method for Sulfur in Petroleum Products (X-ray Spectrographic Method)"; and
 - (C) The heat content shall be determined utilizing ASTM D240-92*, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".
 - * Copies of the American Society for Testing and Materials (ASTM) procedures referenced may be obtained from ASTM, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (610) 832-9585, and are available for copying at the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46206-6015.

or

(2) utilize alternative sampling and analysis methods, provided the methods are determined, by the Office of Air Quality, to be acceptable equivalents to the methods specified in (a)(1) of this Condition.

or

(3) utilize sampling and analysis data supplied by the vendor, as obtained from tests performed on the fuel oils prior to delivery of the fuel oil, provided the tests performed on the fuel oils are determined to be acceptable equivalents to the methods specified in paragraph (a)(1) of this Condition.

(b) Sulfur Dioxide Emission Rates:

Computation of the calculated sulfur dioxide emissions rates to be used to demonstrate compliance with the limits of Condition D.1.3 (D.3.3) shall be determined based on a calendar month average sulfur dioxide emission rate in pounds per million Btu, utilizing the applicable fuel sampling and analysis data and the emission factors contained in U. S. EPA publication AP-42, "Compilation of Air Pollutant Emission Factors" (September 1988)**, unless other emission factors based on site specific sulfur dioxide measurements are approved by the Office of Air Quality and the U. S. EPA.

** Copies of the Code of Federal Regulations (CFR) and AP-42 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402. Copies of pertinent sections are also available at the Indiana Department of Environmental management, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Room 1001, P.O. Box 6015, Indianapolis, IN 46206-6015.

In order to determine compliance with requirements of this Condition and Condition D.1.3 (D.3.3), the Office of Air Quality reserves the right to, at any time, perform a systems audit to determine compliance with the required fuel sampling and analysis procedures. However, prior to such an audit, the owner or operator who becomes subject to an audit shall be provided a copy of the required audit procedures.

Should the Office of Air Quality make a determination of noncompliance with the requirements of this Condition or the limits of Condition D.1.3 (D.3.3), no other compliance determination methods specified in 326 IAC 7 shall be used by the owner or operator to refute the evidence of noncompliance.

Compliance Monitoring (326 IAC 7-2-1(c)(3)):

The owner or operator shall, for all fuels combusted at the dryer burner during each calendar month:

(a) either:

- (1) list the sampling and analysis methods used to comply with the requirements of Condition D.1.10(a)(1) (D.3.16(a)(1)) and record the results of said tests,
- (2) list the sampling and analysis methods used to comply with the requirements of Condition D.1.10(a)(2) (D.3.16(a)(2)) and record the results of said tests, or
- (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.1.10(a)(3) (D.3.16(a)(3)):
 - (A) obtain a certifications from the fuel supplier containing, at a minimum, the following:
 - (i) the name of the oil supplier,
 - (ii) a statement from the oil supplier that certifies the tests completed by the vendor are equivalent to the methods specified in Condition D.1.10(a)(1) (D.3.16(a)(1)) and the data supplied by the vendor is correct and accurate, and
 - (iii) an attachment containing the information necessary to determine the fuel properties required in Paragraph (b) of this Condition; and

- (B) complete a certification, signed by the owner or operator, that states that the certifications and fuel sampling and analyses conducted, represent all of the fuel combusted during the period;
- (b) record the following fuel oil properties, utilizing the applicable methods specified in Condition D.1.10 (D.3.16):
 - (1) the calendar month average sulfur content of all No. 1 and No. 2 oils combusted in percent sulfur.
 - (2) the calendar month average sulfur content of all No. 4 and re-refined oils combusted in percent sulfur,
 - (3) the heat content of each fuel combusted in Btu/ gallons or Btu/cf, whichever is applicable,
 - (4) the sulfur dioxide emission rate in pounds per million Btu; and
- (c) record on a monthly basis:
 - (1) the applicable month,
 - (2) the amount of re-refined oil in gallons per month,
 - (3) the amount of equivalent natural gas in gallons of re-refined oil per month,
 - (4) the amount of equivalent No. 1/ No. 2 fuel oils in gallons of re-refined oil per month, and
 - (5) the amount of equivalent No. 4 fuel oil in gallons of re-refined oil per month,

combusted at aggregate dryer AP1.

Record Keeping (326 IAC 2-7-1(c)(3); 326 IAC 3-7-5(b)):

All of the other record keeping requirements of the stationary plant have been included with the 326 IAC 7 requirements for one comprehensive condition.

The owner or operator shall keep:

- (a) either:
 - (1) a copy of the sampling and analysis test results as specified in Condition D.1.11(a)(1) (D.3.21(a)(1)),
 - (2) a copy of the sampling and analysis test results as specified in Condition D.1.11(a)(2) (D.3.21(a)(2)), or
 - (3) if the owner or operator utilizes vendor sampling and analysis data as provided for in Condition D.1.10(a)(3) (D.3.16(a)(3)), copies of the certifications required in Condition D.1.11(a)(3) (D.3.21(a)(3));
- (b) records of the fuel oil properties required in Condition D.1.11(b) (D.3.21(b));
- (c) records of the amount of fuel combusted, as required in Condition D.1.11(c) (D.3.21(c));
- (d) records of the amount of cutback asphalt produced and the amount of input cutback asphalt binder, as required in Condition D.1.12 (D.3.22);
- (e) records of all visible emission notations from the scrubber/cyclone system as required in Condition D.1.13 (D.3.23); and
- (f) records of all required pressures and water flow rate recordings from the scrubber/cyclone system while the stationary asphalt plant is in operation, as required in Condition D.1.13 (D.3.24).

All records required to be kept in this Condition shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Reporting Requirements: (326 IAC 7-2-1(c)(3)):

There are no reporting requirements in the permit pursuant to 326 IAC 7 because the owner or operator need only submit reports upon request of the Office of Air Quality.

The 326 IAC 7 SO2 emission limit, and its associated compliance determination, compliance monitoring, and record keeping requirements shall be included in their respective sections of both the asphalt plant and alternative operating scenarios, Sections D.1 and D.3, respectively, because these rules apply while the stationary plant is operating alone or in combination with the portable plant.

7. Portable Asphalt Plant:

The proposed co-location will not trigger any new individual facility state requirements or affect any of the existing individual facility state requirements for the portable source. However, the language of the conditions pertaining to rules that are applicable to both the portable and stationary asphalt plants shall be amended to be consistent under both permits.

Compliance Determination

1. Proposed Stationary Asphalt Plant:

Compliance determination for the proposed stationary asphalt plant shall consist of the following:

- a. operation of the emission generating units and any associated control devices at all times the asphalt plant is in operation;
- b. stack testing for PM and PM10 of the applicable asphalt plant emission units and associated control devices to demonstrate compliance with the NSPS (Subpart I), 326 IAC 6-3-2 PM limits, and demonstrate that the fuel use limit combined with the use of emission controls achieves PM10 emissions (alone and when combined with the portable plant), that are less than the applicable major source level of 99 tons per year; and
- c. meeting the 326 IAC 7 compliance determination requirements.

The applicable stationary plant compliance determination requirements shall be included in both Section D.1 and D.3.

2. Portable Asphalt Plant:

The proposed co-location will not trigger any new compliance determination requirements or affect any of the existing compliance determination requirements of the portable plant. However, the language of the conditions pertaining to rules that are applicable to both the portable and stationary asphalt plants shall be amended to be consistent under both permits.

Compliance Monitoring

1. Proposed Stationary Asphalt Plant:

Compliance monitoring for the proposed stationary asphalt plant shall consist of the following:

- a. daily and weekly visible emissions observations,
- b. pressure and water flow rate readings,
- c. recording the grade of cutback asphalt produced (slow or medium cure) each month, and the monthly binder usage, and
- d. meeting the 326 IAC 7 compliance monitoring requirements.

The compliance monitoring requirements shall be included in both Sections D.1 and D.3.

2. Portable Asphalt Plant:

The proposed co-location will not trigger any new compliance monitoring requirements or affect any of the existing compliance monitoring requirements of the portable plant. However, the language of the conditions pertaining to rules that are applicable to both the portable and stationary asphalt plants shall be amended to be consistent under both permits.

Record Keeping:

1. Proposed Stationary Asphalt Plant:

Record keeping for the proposed stationary asphalt plant shall consist keeping records of the required fuel properties and the sampling and analysis test results to document compliance with the limits of 326 IAC 7, records of the types and amount of each fuel combusted to document compliance with the annual and monthly fuel use limits, records of grade of binder produced (slow or medium cure), the amount of cutback asphalt binder used each month, records of all visible emission notations to document compliance with the PM, PM10, and opacity limits, and records of all required pressures and water flow rate recordings from the scrubber/cyclone system to document that the control equipment is operating during operation and that the control device is operating at the parameters established in the compliance stack test that achieve compliance with the PM, PM10, and opacity limits.

The stationary plant record keeping requirements shall be included in both Section D.1 and D.3.

2. Portable Asphalt Plant:

The proposed co-operation will not trigger any new record keeping requirements or affect any of the existing record keeping requirements for the portable plant. However, the language of the conditions pertaining to rules that are applicable to both the portable and stationary asphalt plants shall be amended to be consistent under both permits.

Reporting:

1. Proposed Stationary Asphalt Plant:

The reporting requirements for the source shall include quarterly reports of the monthly fuel use equivalents for the stationary plant, the grade of cutback asphalt, and the amount of cutback asphalt binder used.

No reporting of the records to be kept under 326 IAC 7 shall be required because pursuant to 326 IAC 7-2-1(c)(3), reports need only be submitted to the Office of Air Quality upon request.

The applicable stationary plant reporting requirements shall be included in Section D.1 and D.3.

2. Portable Asphalt Plant:

The proposed co-operation will not trigger any new reporting requirements or affect any of the existing reporting requirements for the portable plant alone. However, the language of the conditions pertaining to rules that are applicable to both the portable and stationary asphalt plants shall be amended to be consistent under both permits.

Conclusion

This new batch mix asphalt plant shall be subject to the conditions of the attached proposed FESOP No.: F 027-14746-03270.